

General Information and Syllabus

Learning Goals:

1. Develop scientific and critical reasoning skills.
2. Learn about the fundamental theories and approaches to the field of perception.
3. Understand some of the links between mind and brain, and how those links are discovered.
4. Increase participation in lecture class by asking questions and contributing to discussions.

Materials

Book: Sensation and Perception, 2nd edition. Wolfe JM, Kluender KR, Levi DM et al. (2009). Sinauer Associates. ISBN13 -978-0878935727.

Book website: <http://sites.sinauer.com/wolfe3e/home/startF.htm>. Contains some demos and essays.

Course Website: on Sakai

Office hours: Dr. Aitkin: Tillett 321, 1:00 – 1:40 pm, Tuesday & Thursdays, and by appointment. TA: TBA

Email: Dr. Aitkin: cdaitkin@rci.rutgers.edu. TA: TBA Lengthy or complex issues will be discussed in person, during office hours. *Note:* Feel free to send an email whenever you need to, but be aware that it may take up to two full business days for us to respond. If you have not received a response after 2 business days, please resend the email.

Class requirements

Hourly exams: 3 exams (see syllabus for dates). The third exam will occur during finals week on the date scheduled by the university.

Exam requirements: Students are required to take all exams. If you miss an exam for a legitimate reason (e.g., illness) you must submit an official excuse (e.g., doctor's note). A make-up exam, composed entirely of short essay questions, will be given at the time of the final. If you do not submit an excuse note, a grade of 0 will be assigned and no make-up will be given. Once you begin work on an exam it will count. No exam scores will be dropped. So, if you are ill, do not take the exam – see your doctor! If you miss the final exam for a legitimate reason, a make-up will be scheduled. There will be no excused absences from the final.

Missed classes: You are responsible for material covered in classes that you may miss. To find out what was covered borrow notes from another student. Then, to discuss material, ask questions, or get additional explanations, come to office hours or make an appointment.

Final Grade: Grade cutpoints are based on the percentage of total points earned from exams as follows:

A: 86-100%. B+: 81-85%. B: 70-80%. C+: 65-69%. C: 60-64%. D: 50-59%. F: <50%

These cutpoints will apply to everyone. No adjustments in cutpoints will be made for individual students.

Ten Helpful Hints (Please read)

1. The most important requirement for doing well in this class is to pay attention in class. Lecture attendance will not be monitored, but understanding the material presented in class is crucial. See discussion in the section “Syllabus: Reading” for more information.
2. The course content is cumulative so if you miss class, your understanding of material in subsequent classes will be compromised.
3. Ask questions in lecture if you're confused. New material relies on the concepts already developed.
4. Ask questions for information, to test your own knowledge and to develop critical skills. If you're not convinced by an argument, say so. Answer questions that are posed in lecture.
5. Make sure you understand the main points of each lecture and the main points of the reading material. You should be able to understand how specific examples and specific details relate to the main themes. Test yourself by writing a short summary or an outline of the lecture. Don't rely on the feeling that you know what's going on. See if you can state the main points.
6. Each lecture builds on the material of the prior lectures. Review your notes, with special emphasis on the main themes, before coming to class.
7. The second most important requirement for doing well in this class is to pay attention to the reading. When reading the text, pay particular attention to the key words and to the graphs and figures. This is where the authors are putting the most important information.
8. Pace your reading wisely. Do not leave it all for the last minute.
9. For individual help, see me after class, or during office hours, or make an appointment.

10. If you would like to discuss exam performance, bring your exam to office hours. Often there is a pattern to the errors that can be diagnosed only by examining your performance. In the interest of fairness to all, no questions will be answered during exams. To do so is equivalent to giving some students help or hints at the expense of other students.

Syllabus

Reading: The material covered in the course is cumulative. Ideas introduced in the first few lectures will be amplified and developed throughout the semester. The required reading overlaps only in part with the corresponding lectures. Some issues developed at length in lecture may be given scant attention in the text while some issues discussed in detail in the text will not be covered in lecture. There will also be some points on which text and lecture do not agree and these will be described as we get to them. The differences between the text and lecture are as it should be: the text and the lecture complement each other; they are not intended to be redundant. **You are nonetheless responsible for material in both.** "Posted readings" (see below) refers to material to be posted on the class website on Sakai.

Unit 1: Origin and nature of the study of perception

Sept. 2	Introduction to major themes	
Sept. 4	Fundamental problem of perception	"The Itch" (posted) + Ch 13 (pp 363 - 376) + book website, Ch 13
Sept. 9	Approaches to the study of perception	"Face-blind" (posted)
Sept. 11	Mental life and neural events	Chapter 1 + book website, Ch 1
Sept. 16	Fechner and psychophysics	
Sept. 18, 23, 25	Visual detection	Ch 2 (pp 31-43; 48-50)+book website Ch2
Sept. 30	Unit 1 EXAM: 30 points	

Unit 2: Early vision

Oct. 2, Oct. 7	Color	Ch 5 + book website Ch5
Oct. 9	Mach Bands; intro to receptive fields	Ch 2 pp 43-48 + book website Ch2
Oct. 14, 16, 21	Spatial vision: psychophysics and neurophysiology	Ch 3 to p 80 + book website Ch3
Oct. 23	Lightness, Brightness	Adelson (2000), posted
Oct. 28	Mid-level vision	Ch 4, pp 85 - 105+ book website Ch4
Oct. 30	Object recognition	Ch 4, 106 - 113
Nov. 4	Unit 2 EXAM: 35 points	

Unit 3: Aspects of vision and audition

Nov. 6	Perceptual development	Ch 3, pp 80-82 + Posted readings
Nov. 11	Perception of depth and stereo	Ch 6 + book website Ch6 + Posted readings
Nov. 13, Nov. 18	Perception of motion and location	Ch 8 + book website Ch 8
Nov. 20, Nov. 25	Attention and scene perception	Ch 7 + book website Ch 7 +Posted readings
Dec. 2, Dec. 4	Hearing	Ch 9 + book website Ch9
Dec. 9	Speech perception	Ch 11, pp 309 - 328 + book website Ch 11

Final Exam: 35 points. The Final Exam is as scheduled by the University: Monday, December 15, **8 a.m. – 11:00 a.m.** <http://scheduling.rutgers.edu/fallfinals.shtml>