

**Learning Goals:**

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

**Book:** Sensation and Perception, 3rd edition. Wolfe JM, Kluender KR, Levi DM et al. (2012). Sinauer Associates. ISBN - 978-0-87893-572-7. Available in either (1) print or (2) downloadable versions. For downloadable version see: <http://www.coursesmart.edu/9780878939534>. You can use either the print or downloadable book for the course, as long as it's third edition

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

Course Website: on Sakai

**Office hours:** Busch Psychology rm 117: Monday and Thursday, 10-11 and by appointment.

Appointments may be made after class. Additional office hours will be scheduled before exams

**Email:** USE ONLY: kowsp301@rci.rutgers.edu. Lengthy or complex issues will be discussed in person, after class or during office hours.

**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 3 exams. Exams must be taken with the section in which you are registered.

**Make-up policy:** 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. 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.

**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.

University policy on academic integrity will be followed: <http://academicintegrity.rutgers.edu/>

**Ten Helpful Hints (Please read)**

1. The most important requirement for doing well in this class is to attend class. Lecture attendance is crucial. 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. 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. If you believe you have spotted a typographical error, raise your hand and report the question number to a proctor.

**Syllabus**

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 is as it should be: the text and the lecture complement each other, they are not intended to be redundant. "Posted readings" (see below) refers to material to be posted on the class website on Sakai.

### Unit 1

Sept 3	Introduction to major themes	
Sept 6	Mental life and neural events I	Chapter 1 (all except the section entitled "Fourier analysis")
Sept 10	Mental life and neural events II	
Sept 13	Fechner and psychophysics	"The Itch" (posted article)
Sept 17	Touch and pain	Ch 13 (up to p 383)
Sept 20	Visual detection	Ch 2 (all except section "communicating to the brain via ganglion cells", pp 44-48)
Sept 24	Visual detection	
Sept 27	Olfaction	Ch 14 (up to p 417)
Oct 1	Comparing across the senses	
Oct 4	Exam 1, 30 points, covers lecture and reading in Unit 1	

### Unit 2

Oct 7	Color I	Ch 5
Oct 11	Color II	Ch 5
Oct 15	Mach Bands; intro to receptive fields	Ch 2 pp 44-48
Oct 18	Spatial vision I	Ch 3 (up to p 80, "Development..")
Oct 22	Spatial vision II	Ch 3 (up to p 80, "Development..")
Oct 25	Brightness, lightness	Adelson (2000), posted
Oct 29	Mid-level vision	Ch 4
Nov 1	Mid-level vision	Ch 4
Nov 5	Perceiving objects and surfaces	Ch 4
Nov 8	Exam 2, 35 points, covers lecture and reading in unit 2	

### Unit 2

Nov 12	Perceptual development	Ch 3, pp 80-83
Nov 15	Perception of depth and stereo	Ch 6
Nov 19	Perception of motion and location	Ch 7
Nov 22	Vestibular system	Ch 12
Nov 27	Attention	Ch 8
Dec 3	Scene perception	Ch 8
Dec 6	Hearing	Ch 9
Dec 10	Speech perception	Ch 11 pp 309-327
Final Exam: 35 points covers lecture and reading.		

### **Final exam must be taken with the section in which you are registered:**

Final Exam on dates scheduled by university: <http://scheduling.rutgers.edu/fallfinals.shtml>

**TF1 301:01 Dec 19 8am-11 am.**

**TF2 301:02 Dec 16 noon – 3 pm**

Time	Dec. 16 Monday	Dec. 17 Tuesday	Dec. 18 Wednesday	Dec. 19 Thursday	Dec. 20 Friday	Dec. 21 Saturday
8:00 AM TO 11:00 AM	TTH Start 1:10- 2:30 pm	MW Start 4:30- 5:50 pm	MW Start 1:10- 2:30 pm	<b>TF Start 8:10- 9:30 am &amp; W11:30- 12:50 F1:10- 2:30 pm</b>	TTH Start 4:30- 5:50 pm	9-12 SAT AM Courses & Chem Lab Group H
12:00 PM TO 3:00 PM	<b>TF Start 9:50-11:10 am</b>	MTH Start 11:30- 12:50 pm	Chemistry Group G	TF Start 11:30- 12:50 pm	MW Start 2:50- 4:10 pm	1-4 SAT PM Courses & Biology Group J