

**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 Wolfe JM, Kluender KR, Levi DM et al. Sinauer Associates.**

**Either: 3<sup>rd</sup> edition ISBN -978-0-87893-572-7. OR 4<sup>th</sup> edition: ISBN-978-1-60535-211-4 (both editions are similar.**

**HOWEVER earlier editions, prior to the 3<sup>rd</sup>, are not acceptable)**

Book website: <http://sites.sinauer.com/wolfe4e> Free and seful! Contains some demos and essays.

Course Website: on Sakai. It will be used to post selected excerpts from slides presented in class, and supplemental readings

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.

There is NO cell phone use (no texting; messaging;; browsing) during class.

No laptop use in class EXCEPT for note-taking. In recent years the frequent use of laptops for activities unrelated to class has become a problem. Students are often unaware of how distracting to the instructor and to other members of the class these activities are. Since attention to the class is a requirement, the policy of no irrelevant laptop use will be enforced by deductions of points from the grade. If this policy proves to be insufficient to prevent irrelevant and distracting laptop use, then I will prohibit all laptop use during class.

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 1	Introduction to major themes	Ch 1 (all except section "Fourier analysis")
Sept 4	Mental life and neural events I	Ch 1 and posted readings, to be announced
Sept 11	Mental life and neural events II	"The Itch" (posted article)
Sept 15	Fechner and psychophysics	Ch 13 (up to section Haptic Perception)
Sept 18	Touch and pain	Ch 2 (all except section "communicating to the brain via ganglion cells")
Sept 22	Visual detection	
Sept 25	Visual detection	
Sept 20	Comparing across the senses	
Oct 2	Exam 1, 30% of grade. covers lecture and reading in Unit 1	

### Unit 2

Oct 6	Color I	Ch 5
Oct 9	Color II	Ch 5
Oct 13	Mach Bands; intro to receptive fields	Ch 2, "communicating to the brain via Ganglion cells"
Oct 16	Spatial vision I	Ch 3 (up to "Development..")
Oct 20	Spatial vision II	Ch 3 (up to "Development..")
Oct 23	Brightness, lightness	Adelson (2000), posted
Oct 27	Mid-level vision	Ch 4
Oct 30	Mid-level vision	Ch 4
Nov 3	Perceiving objects and surfaces	Ch 4
Nov 6	Exam 2. 30% of grade. Covers lecture and reading in unit 2	

### Unit 3

Nov 10	Perceptual development	Ch 3, "Development"
Nov 13	Perception of depth and stereo	Ch 6
Nov 17	Perception of motion and location	Ch 8
Nov 20	Attention	Ch 8, 7
Nov 25	(Wednesday.) Attention	Ch 7
Dec 1	Scene perception	Ch 7
Dec 4	Hearing	Ch 9
Dec 8	Speech perception	Ch 11 "Speech perception"
Final Exam: 40% of grade. NOTE: A portion of the exam will cover material in units 1 and 2.		

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

Final Exam ON THE DATES SCHEDULED BY THE UNIVERSITY; SEE <http://scheduling.rutgers.edu/fallfinals.shtml>. ACCORDING TO THE POSTED SCHEDULE  
301:01 (TF1 class): Dec 16, 8-11 am. 301:02 (TF2): Dec 22, 8-11 am. Tillett 116