

eileen.kowler@rutgers.edu. Email is for brief questions. Lengthy issues will be discussed in person.

**Office hours:** Tuesday and Friday, 10:00 to 10:30 ROOM to be determined

**Book: Sensation and Perception Wolfe JM, Kluender KR, Levi DM et al. Oxford Univ Press.**

**Editions: 3<sup>rd</sup>, 4<sup>th</sup> or 5<sup>th</sup>. Earlier editions, prior to the 3<sup>rd</sup>, are not acceptable.**

Book website : [https://oup-arc.com/access/sensation-and-perception-5e-student-resources?filters={%22and%22:\[{%22tags%22:\[{%22\\$in%22:\[%2255b7be27a1daa33b538f25c6%22\]}\]}\]}&chapters=55b7be27a1daa33b538f25c6&bytag=1](https://oup-arc.com/access/sensation-and-perception-5e-student-resources?filters={%22and%22:[{%22tags%22:[{%22$in%22:[%2255b7be27a1daa33b538f25c6%22]}]}]}&chapters=55b7be27a1daa33b538f25c6&bytag=1) Free and useful! Contains demos and essays.

Course Website: on Sakai. Contains selected slides presented in class and supplemental readings.

### **Learning Goals:**

1. Develop scientific and critical reasoning skills.
2. Learn about theories and approaches in the field of perception.
3. Understand the links between mind and brain. The link between mind and brain is the MAIN THEME OF THIS ENTIRE COURSE.
4. Lectures are interactive: This means we talk to each other. Stay alert. Ask and answer questions. Contribute to discussions.

### **Policies**

Exams: 3 exams (see syllabus). Exams must be taken with your registered section

Missed an exam? 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 (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 a class? DON'T MISS CLASS. Missing even 1 or 2 classes each unit means you missed 20% of the material! And, the material is cumulative so your understanding will suffer even when you return! You are responsible for material covered in classes that you may miss. You can certainly ask questions about the material afterward.

**NO cell phone use during class. NO texting. No laptop use in class EXCEPT for note-taking.**

Using your laptop in class is distracting to me and the people around you.

The prohibition of laptop use except note-taking 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.

ACADEMIC Integrity: University policy will be strictly followed: <http://academicintegrity.rutgers.edu/>

### **HOW TO LEARN AND DO WELL IN THIS CLASS**

- Don't miss class.
- Ask ask ask. If you have a question, I can assure you someone else does. Ask in class. Don't wait.
- Listen, think, ask. Aim for understanding.
- Take notes wisely. Don't let note-taking get in the way of listening, thinking, and understanding.
- Scientists (and, Psychology is a science) ask questions, make observations and draw conclusions. Keep these three domains in mind when you learn about the field of sensation and perception.
- Be prepared! Don't wait for the last minute before exams. Do the reading on time. Work on the

exercises in the text website: <http://sites.sinauer.com/wolfe4e>. Re-read your notes BEFORE each class. WRITE descriptions (sentences, not phrases) of the concepts listed in the posted KEY TERMS lists for each unit. And, ask questions. Ask often, ask early. Do these things and you will be well prepared!

- In Sensation and Perception important concepts are summarized in pictures and graphs. When you read the text, READ the GRAPHS too! Read the caption and axes labels. Think about what's plotted in the graph. If you understand the graphs, you'll understand the material. DON'T skip the graphs.
- And, don't miss class. Stay alert. Participate. Stay engaged.

## Syllabus

The required reading overlaps in part with the 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. The text and the lecture complement each other, they are not intended to be redundant. "Posted readings" below refers to material posted on the class Sakai site.

### Unit 1

Sept 3	Introduction to major themes	Ch 1
Sept 6	Mental life and neural events I	Book website, Essay 1.1: <a href="https://wolfe4e.sinauer.com/essay01.01.html">https://wolfe4e.sinauer.com/essay01.01.html</a>
Sept 10	Mental life and neural events II	<i>The Itch</i> (posted article on class sakai site)
Sept 13	Mueller's Doctrine	<i>J. Mueller on the Specific Energies of Nerves</i> (on class sakai site)
Sept 17	Fechner and psychophysics	Review the section on Signal detection in ch 1
Sept 20	Touch and pain	Ch 13 (up to section Haptic Perception)
Sept 24	Visual detection	Ch 2 (all except section "communicating
Sept 27	Visual detection	to the brain via ganglion cells")
Oct 1	Comparing across the senses	
Oct 4	Exam 1, 30% of grade. covers lecture and reading in Unit 1	

### Unit 2

Oct 8	Color I	Ch 5
Oct 10	Color II	Ch 5
Oct 15	Mach Bands; intro to receptive fields	Ch 2, "communicating to the brain via Ganglion cells"
Oct 18	Spatial vision I	Ch 3 (up to "Development")
Oct 22	Spatial vision II	Ch 3 (up to "Development")
Oct 25	Brightness, lightness	Adelson (2000), posted 339-344.
Oct 20	Mid-level vision	Ch 4
Nov 1	Mid-level vision	Ch 4
Nov 5	Perceiving objects and surfaces	Ch 4
Nov 8	Exam 2. 30% of grade. Covers lecture and reading in unit 2	

### Unit 3

Nov 12	Perceptual development	Ch 3, "Development"
Nov 15	Perception of depth and stereo	Ch 6
Nov 19	Perception of location	Ch 8
Nov 22	Perception of motion	Ch 8
Nov 27	(Wednesday!) Attention	Ch 7
Dec 3	Scene perception	Ch 7
Dec 6	Hearing	Ch 9
Dec 10	Speech perception	Ch11 ("speech")
Final Exam: 40% of grade. NOTE: A portion of the exam will cover material in units 1 and 2. <u>SEE NOTE BELOW FOR DATE!</u>		

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

THE UNIVERSITY DETERMINES THE DATE OF THE FINAL. SEE:

<https://scheduling.rutgers.edu/scheduling/exam-scheduling/final-exam-schedule>

ACCORDING TO THIS POSTED SCHEDULE THE EXAMS DATE IS:

301:01 (TF1 class): Thursday Dec 19, 8-11 am.

EXAMS ARE IN TILLET 116

Instructor bio: Eileen Kowler is a Distinguished Professor of Psychology, specializing in the areas of perception, cognition, attention and eye movements. Her research has been carried in collaboration with a large number of students, graduate and undergraduate.