Psychology 330: Sensation and Perception
Summer 2015
Monday – Friday, 1:00 - 4:00

Instructor: Richard Abrams
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935-6538 (email is usually better!)
323 Psychology Building
Office hours: Every day from 12:30 - 1:00, and by appointment.
(If I’m not in my office you can look for me in my lab: 424 Psych Bldg.)
Or, if a topic needs clarification—send me email after class and I will try to answer your
question at the beginning of our next class.

Lecture slides, grades, etc: [http://rabrams.net](http://rabrams.net)
Select Courses, then select this course.
You may be asked for the following:
Username:
Password:

(If you are unable to purchase the book before class begins, I can help with a
loaner, or a pdf...)

Course objectives:

What’s involved in seeing and hearing? In this course you will learn about perception beginning
with the physical stimuli (light and sound) that impinge upon the sensory receptors, to details of
the physiological mechanisms that convert the physical stimuli into electrical signals in
neurons, through the higher-level percepts that the stimuli generate. Demonstrations and
illusions will be used as we learn about the anatomy and physiology of the sensory systems, and
study the brain mechanisms that are involved in vision and audition. You may see (and hear)
the world in a very different way after learning about some of the details of our perceptual
systems!

How to succeed in this course

In order to master the material covered in this course it is important for you to attend the
lectures and also for you to read the material in the textbook. There will be considerable overlap
between the textbook and the lectures, with many important concepts being described in both
book and lecture. However, there also is additional material that will be presented in the lecture
that is not contained in the textbook. (Similarly there is some material in the book that will be
discussed only minimally in lecture.)

To succeed in the course I suggest that you at least skim over the material in the textbook prior
to the class in which the material is to be discussed. Doing this will give you a basic sense of
the main concepts and that can help you get the most out of the lectures. Then, after the
lecture, re-read the corresponding sections in the textbook. At that time you may be better able
to appreciate some of the material in the book, since it will have been discussed in the lecture.
The lecture slides will be available on the course website (http://rabrams.net) prior to each lecture. You will see that the slides are not a substitute for attending the lectures: many of the slides contain very little text, and you really need the explanation from lecture in order to make sense out of many of them. I provide the slides so that in class you can focus more on learning the concepts that are under consideration instead of expending effort scrambling to be sure that your notes are complete.

In addition to keeping up with the readings, and attending lectures there are other steps that you can take that will help you master the course material. First, the publisher of the textbook has a companion website that contains a few features that might be helpful. I will tell you about those features in class. Also, I have regular office hours and am also available by appointment to answer any questions that you might have.

**Grading:**

3 exams, worth 35%, 35%, and 20% of final grade (weighted based on score)
2 one-page papers, each worth 5% of final grade

**Notice:** As in all courses, standards of academic integrity are expected to be observed in this course. Please see the course listings for a statement of academic integrity guidelines. Be especially careful on the papers.

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**Course Outline**

- **Introduction, psychophysics** Chp. 1 (pp.1-7, 20-43)
- Vision 1 (eye, retina, receptive fields) pp. 7-20, Chp. 2
- Higher-level vision Chp. 3, pp. 142-145
- Color Vision Chp. 5 (pp.153-177,180-187)

**Exam #1 (Friday May 22nd, 2015)**
**First short paper due Tuesday May 26th, 1:00 pm.**

- Perceptual Organization, objects Chp. 4
- Depth, Size, and Lightness Perception Chp. 6, pp. 177-180
- Perceiving movement Chp. 7 (to p. 245)
- Attention Chp. 8

**Exam #2 (Monday June 1st, 2015)**
**Second short paper due Wednesday June 3rd, 1:00 pm.**

- Perception & Action pp 245-255
- Hearing Chps. 9 & 10
- Speech Perception Chp. 11

**Exam #3 (Friday June 5th, 2015)**