

# PSYCH 253: Introduction to the Psychology of Perception

Evan D. Bradley, Instructor

Spring 2015, Penn State Brandywine



## 1 Basics

### 1.1 Class

**day** TR

**section 1** 10:00–11:15am

**section 2** 1:00–2:15pm

**place** Main 205

### 1.2 Instructor

**email** [evan.d.bradley@psu.edu](mailto:evan.d.bradley@psu.edu)

**phone** 610.892.1458

**office** Main Hall 207D

**hours** MW 10:00am–noon, or by appointment

**www** <http://www.evanbradley.net>

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## 2 Course

### 2.1 Overview

This course provides an overview of human perception, which is the process of taking in and processing information from the environment. The well-studied domains of vision and audition are discussed in depth, but tactile and chemical senses, and complex behaviors involving perception (*e.g.*, language) are discussed.

### 2.2 Objectives

#### 2.2.1 Learning Goals

After taking this course, you should be able to:

1. Identify and describe the functions of the major biological and mental components of each sensory system;
2. Compare and contrast perceptual processes across senses;
3. Describe the relationship between basic perceptual processes and complex cognitive functions, such as memory and language;
4. Identify perceptual disorders and explain their effects.

#### 2.2.2 Academic Goals

In addition to acquiring specific points of knowledge, it is my hope that by participating in the course, you will improve your academic skills in a number of areas which will benefit you in your future studies. After taking this course, you should improve your ability to:

1. read primary and secondary research literature and interpret the results of experiments;
2. apply scientific reasoning to social/behavioral phenomena;
3. skeptically examine folk beliefs about how the mind works.

### 2.3 Prerequisites

You should have already taken PSYCH 100: Introduction to Psychology before taking this class. If you have not, please see me as soon as possible.

### 2.4 Materials

The textbook for the course is:

Yantis, S. (2013). *Sensation and perception*. Worth Publishers.

Your primary reading assignments will come from this book, and are outlined in the course schedule. Your textbook also includes access to online resources which we will use in and out of class, and which you are also responsible for accessing.

In addition to the textbook, we will complete several lab activities from the following book:

Stafford, T., & Webb, M. (2005). *Mind hacks: Tips & tools for using your brain*. O'Reilly Media.

You are not required to have this book, but I recommend it, as it includes a lot of valuable information, and an inexpensive e-book version and super-cheap used copies are available.

We may also read some sections from this year's Brandywine Common Read:

Brockman, J. (Ed.) (2014). *What Should We Be Worried About?: Real Scenarios That Keep Scientists Up at Night*. HarperCollins.

The book is available in the campus bookstore and major retailers, and reserve copies are available at the library; I will try to provide any assigned portions electronically.

Additional materials may be assigned, such as book chapters, journal articles, and multimedia. All materials will be provided to you in class or electronically, or placed on reserve at the library. See the course schedule for preliminary assignments.

## 2.5 Assignments

Below is an overview of the types of assignments you will complete; specific instructions for each assignment will be provided as they are assigned.

### 2.5.1 Lab Assignments

After participating in lab demonstrations (either in class, or on your own), you will compose a short lab report or answer questions synthesizing the results this with concepts discussed in lecture. Lab activities will typically take place weekly on Thursdays, and lab assignments will either be completed in class, or will be due the following Tuesday. Readings will often be assigned in conjunction with lab activities

### 2.5.2 Homework

Homework will be assigned regularly (about once per week). The goal of these assignments is to help you prepare for and/or reflect on what happens in class. Some types of homework which may be assigned include:

- reading questions;
- short reaction papers/writings;
- finding or preparing an example for discussion.

**Reading Questions** The most frequent homework assignment you will complete will be reading questions, which involve answering instructor or student provided questions designed to highlight the important points of a reading, and/or formulating your own discussion questions based on the reading(s) for the day's class. We will discuss in class how to formulate a productive discussion question; these may either be things you remain unclear about, or points of discussion you would like the class to consider. Such assignments should be completed by 9am on the day of the class to which they pertain. Reading questions will be assigned for most textbook readings scheduled for Tuesdays.

#### Homework Notes:

- You will usually submit homework assignments via ANGEL, but sometimes I will ask you to bring them to class printed or handwritten. If you handwrite any assignments, please make sure they are **legible!**
- You are encouraged to discuss your assignments with other students, but for individual assignments you must turn in your own work.
- I may assign other kinds of homework besides those listed here.

### 2.5.3 Classwork

Class participation is at the heart of every course I teach, because we will all get the most out of the course by actively engaging with the material. My goal is to keep "lecture" time to the minimum necessary; to that end, we will complete many individual and small-group activities during class time. These may include:

- demonstrations
- short writings
- presentations

In-class assignments may be collected, evaluated, and returned in order to assess your progress, and reward your work by contributing to your grade.

### 2.5.4 Exams

There will be a midterm exam during regular class time, and a final exam during the exam period. While the final exam focuses on material from the second half of the course, it can be considered cumulative, in the sense that the second half of the course is dependent on knowledge of the first, and the exam includes general course themes drawing on all of the material and requiring you to relate concepts from the latter half of the course to those from the first.

## 2.6 Grades

### Assignment Weighting

Each assignment carries a different weight in determining your overall grade:

category	assignment	weight
lab assignments	35%	35%
classwork	15%	15%
homework	15%	15%
tests	35%	midterm 15%
		final 20%

### Grading Scheme

Your grade for the course will be determined based on a hybrid norm- and criterion-referenced grading scheme. *Criterion* refers to the fact that should you achieve a certain score, you will earn a corresponding grade (see the table below); *norm* refers to the fact that I take the class distribution of scores into account when assigning grades.

score $\geq$	grade $\geq$
93%	A
90%	–
87%	+
83%	B
80%	–
77%	+
70%	C
60%	D

This is not grading ‘on a curve’ *per se*, in that it is possible for everyone in the class to get an A, or for everyone to get a C; this simply means that I may adjust the cutoffs for each letter grade at my discretion, depending on the overall distribution of scores. I will only adjust these cutoffs downward—that is, you are guaranteed to receive a grade at least as high as that listed in the table corresponding to your score, but you may receive a higher grade. I also take individual improvement over the course of the semester into account.

### Grade Appeals

I am human, and I do make mistakes when grading assignments. If you feel I’ve made a mistake, or been unfair in grading your work, or if you’d just like further explanation so that you can improve your work, please speak to me; **be prepared to justify your appeal.**

**Grade cutoffs and improvement adjustments are not subject to appeal!**

### Missed/Late Work

It is important to stay up-to-date with readings and assignments. I have done my best to design the course to be flexible and manageable, but with the schedule mostly set by design, it is easy to fall behind quickly. Please let me know early on if you are having trouble with any particular assignment, or the workload in general. You must complete all assigned work in a timely fashion in order to receive full credit.

### Important guidelines:

- Assignments will be penalized 5% (a half-letter grade) for each 24 hours late.
- Late work will not be accepted more than two weeks after the original due date.
- Some assignments (*e.g.*, preparation for in-class work) will not be accepted late.
- All outstanding assignments at the end of the term (the last day of class) will receive a zero.

## 3 Policies

### 3.1 Attendance

Attendance is **required**. That said, I will not routinely record attendance, nor assign any part of your grade just for showing up; however, your understanding of course concepts will surely suffer due to poor attendance, and you will miss the chance to participate in discussion and other graded class activities. If you miss class, please contact me (and your classmates) as soon as possible to find out what you've missed. Makeup opportunities for in-class work (if possible) will be permitted at my discretion for **approved absences only** (documentation may be required—see <http://www.psu.edu/oue/aappm/classabs.pdf>).

**If you know you are going to miss class, it is better to speak to me beforehand to make arrangements than to ask for help after missing something important!**

### 3.2 Academic Integrity

Academic honesty is of the utmost importance in the academic world. Cheating, plagiarism, and other forms of academic dishonesty are serious offenses, and ignorance is no excuse; therefore, I urge you to become familiar with the University's Code of Conduct (<http://studentaffairs.psu.edu/conduct/codeofconduct/>) and statement on academic integrity (<http://www.psu.edu/dept/oue/aappm/G-9.html>). I encourage you to seek my advice if you are unclear about any part of this policy.

All students are expected to act with civility and personal integrity; respect other students' dignity, rights and property; and help create and maintain an environment in which all can succeed through the fruits of their own efforts. An environment of academic integrity is requisite to respect for self and others and a civil community. Academic integrity includes a commitment not to engage in or tolerate acts of falsification, misrepresentation or deception. Such acts of dishonesty include cheating or copying, plagiarizing, submitting another person's work as one's own, using Internet sources without citation, fabricating field data or citations, "ghosting" (taking or having another student take an exam), stealing examinations, tampering with the academic work of another student, facilitating other students' acts of academic dishonesty, etc.

Students charged with a breach of academic integrity will receive due process and, if the charge is found valid, academic sanctions may range from a grade of *F* for the assignment to a grade of *F* for the course, depending on the severity of the offense.

### 3.3 Academic Accommodations

In accordance with the Americans with Disabilities Act of 1990, it is Penn State's policy to provide reasonable academic adjustments for students with documented disabilities. Any student who thinks he/she may need an accommodation based on a disability should speak to me and contact Sharon Manco at 610.892.1461 or [sam26@psu.edu](mailto:sam26@psu.edu). This notification should occur by the end of the first week of the semester. Please visit [www.equity.psu.edu/ods/](http://www.equity.psu.edu/ods/) for complete information.

### 3.4 Instructor Availability

The best way to get in touch with me outside of class is by email. My usual policy is to answer student emails within 24 hours; I will, however, do my best to answer emails sent before the close of business (usually 5pm) the same day, but I make no guarantees. Of course, you can always ask questions during or after class, or schedule a time to meet in person. Please reserve phone contact for emergencies.

### 3.5 Classroom Technology

Please silence your cell phone before entering lecture or discussion, and **please refrain from texting during class!** If you experience an emergency requiring you to receive/make a call/text, please be polite and quietly excuse yourself from the classroom before doing so. Laptop computers should be used for note-taking purposes only.

**I reserve the right to limit computer use in the classroom if it becomes disruptive to the learning process.**

# Schedule

The schedule is subject to changes and additions. Please read the assigned material before the day for which it is assigned.

week	day	unit	topic(s)	reading(s)	assignment(s) due
1	T 1/13	Introduction	Foundations	Yantis 1	Preliminary Survey
	R 1/14				
2	T 1/20	Vision	Object Recognition	<i>Psychometrics Lab</i>	Ch. 1 HW
	R 1/22				
3	T 1/27	Midterm	Midterm Review	Yantis 2	Psychometrics Lab
	R 1/29				
4	T 2/3	Attention	The Auditory System	Yantis 3	Light & Eye Lab
	R 2/5				
5	T 2/10	Culture	Speech & Music	Yantis 4	Ch. 3 HW
	R 2/12				
6	T 2/17	Body Senses	Somatosensation	Yantis 5; Lombrozo (2014)	Ch. 4 HW
	R 2/19				
7	T 2/24	Chemosensation	Olfaction	Yantis 6	Ch. 5-6 HW
	R 2/26				
8	T 3/3	Disorders	Disorder Presentations	Yantis 7	Ch. 7 HW
	R 3/5				
<i>Spring Break</i>					Midterm Feedback
9	T 3/17	Disorders	Disorder Presentations; Final Review	Yantis 8	Ch. 8 HW
	R 3/19				
10	T 3/24	Disorders	Disorder Presentations; Final Review	Luhmann (2014); House (2014) <i>WSWBWA readings</i>	Culture Discussion
	R 3/26				
11	T 3/31	Disorders	Disorder Presentations; Final Review	Yantis 9	Attention Lab
	R 4/2				
12	T 4/7	Disorders	Disorder Presentations; Final Review	Yantis 10	Ch. 9-10 HW
	R 4/9				
12	T 4/7	Disorders	Disorder Presentations; Final Review	Yantis 11	Ch. 11 HW
	R 4/9				
14	T 4/21	Disorders	Disorder Presentations; Final Review	Yantis 12; Umeå University (2014)	Audition Lab
	R 4/23				
15	T 4/28	Disorders	Disorder Presentations; Final Review	Walker (2014); <i>Touch Lab</i>	Touch Lab
	R 4/30				
F	<b>Final Exam, TBA</b>				Course Feedback

## References

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