

# THEORY OF PERCEPTION

## FALL 2014

INSTRUCTORS:	Alison Peterman	Lauren Emberson
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OFFICE HOURS:	Wednesday 12:00-2:00 pm Lattimore 520	Mondays 4:40-6pm, by appointment Meliora 403

TIME AND LOCATION: MW 3:25-4:40, Goergen Hall 110

### COURSE DESCRIPTION AND GOALS

This course will be an introduction to the theory and philosophy of perception, especially visual perception. We will focus our discussion on three interrelated questions:

First, is perception direct or indirect? In other words, do we directly “pick up” information about the world, or is there a process of conscious or unconscious inference involved in obtaining information from sensory input?

Second, how much, if at all, does what we normally think of as “cognition” permeate perception? Is vision just an unintelligent circuit along which information is passed to be used in cognitive processes, or is there top-down influence from other cognitive systems like beliefs and expectations?

Third, what can we properly be said to “see” or “perceive” - that is, what are the contents of perception, especially visual perception? Do we just see colors and light that we then interpret objects in the world, or do we see more complex entities and states of affairs?

We will read contributions to these questions from philosophers and scientists from the past and working today.

### POLICIES

Please let us know right away if you need special accommodations because of a documented condition that interferes with your learning.

Please review the class schedule sometime in the next week and let us know if there are any issues.

Please turn off your cell phones and laptops when you arrive; if you are texting we will ask you to leave.

The syllabus is subject to change as the semester progresses.

Student success at the University of Rochester includes more than just academic performance. Please feel comfortable speaking with us about challenges you are experiencing within and outside of the classroom so that we may submit a CARE report on your behalf. A CARE report is submitted when the level of concern for a student necessitates inclusive, multi-layered support from the campus community. The CARE network administrator shares information only with staff who need to know it in order to help you.

## ACADEMIC HONESTY

Students and faculty at the University must agree to adhere to high standards of academic honesty in all of the work that we do. As freshmen, students read and sign an academic honesty policy statement to indicate that they understand the general principles upon which our work is based. The College Board on Academic Honesty website gives further information on our policies and procedures: [www.rochester.edu/college/honesty](http://www.rochester.edu/college/honesty).

## ASSESSMENT

### READING QUIZZES (10%):

There will be seven unannounced reading quizzes. They will very short and simple, graded as satisfactory or not, designed only to check if you have read. Each will be worth 2%. We will drop two automatically, which means if you attend fairly regularly it should be no problem to get to five. So, we will not allow makeups except under the \*MOST EXTENUATING\* of circumstances.

### RESPONSE PAPERS (40%):

There will be four three-page response papers assigned over the course of the semester. You must hand in all four, but we will drop the one with the lowest grade. These are a very good opportunity to explore what you might be interested in writing about for your final paper. For each response paper, you may write on any one reading, or any combination of readings, assigned between the day that the previous response paper was due (including that day) and the day that the response paper is due (including that day).

### PARTICIPATION (5%):

Attending class regularly, asking questions, and contributing to class discussion will contribute to this part of your grade. If you think you will be unable to meet this requirement for any reason, please see one of the instructors as soon as possible to discuss your options.

## FINAL PAPER (45%):

You will write a ten-page final paper, either elaborating a topic covered in class or discussing a new topic. This paper can be written in the style of a philosophy paper (i.e., focused on elucidating a specific line of argumentation), as a cognitive science review article (i.e., employing references to argue for a particular perspective) or some effective combination of the two. The paper will be due on December 16th. You'll be required to propose a topic for your paper to the instructors in Week 12. Then submit a draft of your paper for peer editing in Week 14. You will have 1 week to read and review a paper by another student in the class then another week to make changes to this paper before handing in the final draft to the instructors. The draft will count for 5% of your final grade, and participating in the peer review will count for 5% of your final grade (out of the 45% for your final paper).

## COURSE SCHEDULE

The readings listed for each day are to be read *before* the lecture on that day.

### Week 1

September 3: Introduction

### Week 2

September 8: Introduction to philosophy of mind: Representation and intentionality

\* Crane: Chapter One of *The Mechanical Mind*

September 10: Representation and information in vision

\* Fish: Introduction to *Philosophy of Perception*

\* Palmer: Section 1.1 (pages 5-15) of *Vision*. Note that you are not required to read the whole chapter, although it is posted. If you have no cognitive science background, you may wish to.

### Week 3

September 15: Blindsight

\* Ramachandran, *Phantoms in the Brain* Chapter 4: The Zombie in the Brain

September 17: The contents of perception

\* Peacocke: Sensation and the Content of Experience: A Distinction

### Week 4

September 22: Indirect perception in the history of philosophy

\* Locke: selections from *An Essay Concerning Human Understanding*

September 24: Indirect perception in the history of philosophy

- \* Berkeley: Dialogue One, pages 1-15 (up to "I frankly own, Philonous, that it is in vain to stand out any longer.")

Week 5

September 29: Indirect perception in the history of philosophy

- \* Berkeley: Dialogue One, pages 15-end.

October 1: Indirect perception in the history of philosophy

- \* Berkeley: selections from "An Essay Toward a New Theory of Vision"

Week 6

October 6: Indirect perception in the history of philosophy

- \* Ayer: The Argument From Illusion
- \* Response paper 1 due

October 8: Direct perception in the history of philosophy

- \* Reid, selections 1

Week 7

October 13: FALL BREAK - NO CLASS

October 15: Direct perception in the history of philosophy

- \* Reid, selections 2

Week 8

October 20: Direct perception in the history of philosophy

- \* Reid, selections 3
- \* Response paper 2 due

October 22: Indirect perception in the history of cognitive science

- \* Helmholtz, "From *Treatise on Physiological Optics*"

Week 9

October 27: Indirect perception in the history of cognitive science

- \* Ullman, "Tacit Assumptions in the Computational Study of Vision"

October 29: Direct perception in the history of cognitive science

- \* Gibson: “A Theory of Direct Visual Perception,” In A. Noë & E. Thompson, *Vision and Mind*, p. 77-89.

#### Week 10

November 3:

- \* Goldstein: “The Ecology of J.J. Gibson’s Perception”

November 5: I

- \* Chemero: “An Outline of a Theory of Affordances”
- \* Response paper 3 due

#### Week 11

November 10: Contemporary discussion direct/indirect

- \* Rock, “Inference in Perception” Epstein
- \* Epstein, “‘Why do Things Look As They Do?’ What Koffka Might Have Said to Gibson, Marr and Rock”

November 12: Contemporary discussion direct/indirect

- \* Churchland, “Is the Visual System as Smart as it Looks?”

#### Week 12

November 17: Cognitive penetration of perception

- \* Pylyshyn (1999). “Is vision continuous with cognition? The case for cognitive impenetrability of visual perception” *Behavioral and Brain Sciences*, 22, 341-365.

November 19:

- \* From Responses to Pylyshyn 1999: Read Bermudez (367-368), Crassini et. al. (372-373), Edelman (376), Moore (385-386), Noë and Thompson (386-388).

#### Week 13

November 24: Functionalism and the contents of perception

- \* Harman: The Intrinsic Quality of Experience
- \* Response paper 4 due

#### THANKSGIVING BREAK

#### Week 14

December 1: Cognitive penetration of perception

- \* Lupyan: “Cognitive penetrability of perception in the age of prediction: Predictive systems are penetrable systems”
- \* Draft 1 due

December 3: Cognitive penetration of perception

- \* Lupyan to visit the class: Send questions for discussion before class
- \* Peer review comments due

Week 15

December 8: Future directions in the theory of perception:

- \* Shams & Beierholm, “Causal Inference in Perception”
- \* Draft 2 due

December 10: Future directions in the theory of perception:

- \* TBA

December 19: Final paper due