

PHL 145Q: Minds and Machines  
Tuesdays and Thursdays 12:30-1:45pm  
Bausch and Lomb 269

Instructor: Professor Ney  
Office: Lattimore 523  
Email: [alyssa.ney@rochester.edu](mailto:alyssa.ney@rochester.edu)  
Phone: x58109  
Office Hours: Tuesdays 10:00am - noon

What is it to have a mind? What is it to think? Are we just computers? Or are our mental powers tied up with our biology in such a way that the computer paradigm is beside the point?

We will take a philosophical approach to answering these questions, engaging several current debates regarding the nature of cognition and whether we can indeed think of ourselves as, to use Marvin Minsky's phrase, "meat machines". You will learn to critically engage with contemporary sources in the philosophy of mind, cognitive science, and artificial intelligence.

No prior knowledge of cognitive science or philosophy is required.

Text:

There are three required books for this course available at the bookstore:

Brie Gertler and Lawrence Shapiro, eds. *Arguing about the Mind*. Routledge, 2007.  
Steven Pinker. *How the Mind Works*. W.W. Norton and Co., 1997.  
Daniel Wegner. *The Illusion of Conscious Will*. MIT Press, 2002.

All other readings will be found on Blackboard.

Grading:

Assessment in this course will be on the basis of weekly written assignments, a presentation, a midterm, and a final exam. Attendance is mandatory.

\*Borderline cases will be decided on the basis of class participation.

### I. Weekly Assignments

Students are responsible to submit, over the course of the semester, five written discussion pieces of approximately 2 pages each (double spaced) on assigned questions. Assignments will be graded on a satisfactory/unsatisfactory basis. These will be turned in electronically via Blackboard by Tuesday at noon, and will under no circumstances be submitted late. Satisfactory completion of these written assignments will be worth 20% of your final grade.

## II. Presentations

Everyone in the class will be expected to give one short presentation on an assigned reading. These presentations will involve a twenty minute discussion of the reading for the day followed by questions and discussion by the rest of the class. You can give these presentations individually or pair up into groups of two.

Presentations will be informal. There is no need to read a paper that one has prepared. Instead, one can come with a handout that summarizes the main arguments in the reading and a few questions and/or critiques of these arguments. The most important part of the presentations is that you are able to give a clear summary of what the author is saying which you can convey to the rest of the class, as well as some good questions to feed discussion. Producing your own original ideas on the piece is secondary. Students are encouraged to stop by my office to discuss the presentations beforehand. The presentation will count for 30% of your grade.

## III. Exams

A midterm examination will be held in class on Thursday, February 19. This will cover the materials in the readings from the first half of the course. The final exam will be held on Wednesday, May 6 at 7:15 pm and will cover material from the second half of the course. Please make a note of these dates now and plan your travel arrangements accordingly. There will be two sections on each exam: a short answer section in which you will be asked to define concepts and views, and a longer section in which you will be asked to explain arguments. Study guides will be handed out in advance. Each exam will count for 25% of your grade.

## Topics and Assigned Readings:

### I. Could Computers Be Minds?

#### *Readings:*

- Alan Turing, Computing Machinery and Intelligence (in Gertler & Shapiro)
- John Searle, Minds, Brains and Programs (in Gertler & Shapiro)
- Daniel Dennett, Can Machines Think? (in Gertler & Shapiro)
- Rodney Brooks, The Cog Project: Building a Humanoid Robot (link online)

### II. How Does the Mind Work?

- Steven Pinker, *How the Mind Works*
- James Garson, Connectionism (link online)
- Thomas Nagel, The Incompleteness of Objective Reality (in Gertler & Shapiro)
- Annette Karmiloff-Smith, Why Babies' Brains are not Swiss Army Knives (e-reserve)

- Barbara Herrnstein Smith, *Sewing Up the Mind* (e-reserve)
- John Haugeland, *Mind Embodied and Embedded* (e-reserve)

### III. What am I?

- Daniel Dennett, *The Self as a Center of Narrative Gravity* (in Gertler & Shapiro)
- Galen Strawson, *Against Narrative* (in Gertler & Shapiro)
- Daniel Wegner, *The Illusion of Conscious Will*
- Michael Gazzaniga, selections from *The Ethical Brain* (e-reserve)