I. COURSE DESCRIPTION

This is a course in philosophy. One sub-field in philosophy is called philosophy of mind. Philosophy of mind investigates what minds are, and how they relate to the physical world. Philosophers of mind frequently offer courses in philosophy of psychology. A class in philosophy of psychology investigates the status of leading theories of the mind and visits foundational questions about the nature of the mind.

This term, my focus will be twofold. First, and most centrally, we’ll be focusing on the most influential contemporary view about the nature of the mind: the view that the mind is ultimately just a computational device. (Psychologists and philosophers who hold this view and work within this framework are said to be doing “computational psychology”). We will try to answer the question: are we ultimately just sophisticated computers? Second, we will sometimes engage in joint projects with my consciousness studies class to delve into the nature of consciousness. (We will perform a brain dissection, learn
about split brains, and so on). These topics come together at the end when we visit the issue of machine consciousness.

(Note: the topics of modularity, innateness, concepts, memory and attention will be covered in detail in my planned Introduction to Cognitive Science class. The first two of these topics are also covered here).

II. GOALS:

At the beginning of the class, students will learn the major positions on the nature of mind. Then, we will turn to the contemporary drive to explain the mind as a sophisticated computer. After learning about theoretical work in computational psychology and cognitive science more generally, we will examine various research programs that try to make conscious and intelligent robots. Students will learn to critically present the issues covered, both verbally and in writing.

III. TEXTS:


Susan Blackmore, *Consciousness: an Introduction.* (This semester only, for joint work with the Consciousness Studies class).

Ned Block, *Readings in Philosophy and Psychology*.

These are at the bookstore. Various papers on the web and on reserve.

Warning: much of the material for this class is tough. It is natural to find some of the language puzzling. You may have to read the items a few times. It often helps to read them again after lecture.

To make things as clear as possible, I generally put my lecture notes on the web so that you can review them. Further, we discuss the readings carefully in class. You will work in groups in class to discuss the readings at various points.

IV. COURSE REQUIREMENTS:

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<tr>
<th>Requirements</th>
<th>Percent of Final Grade</th>
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<tbody>
<tr>
<td>Class presentations and participation</td>
<td>15%</td>
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<tr>
<td>Reports and impressions on class readings</td>
<td>20%</td>
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<tr>
<td>Paper, due at mid-term time</td>
<td>25%</td>
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<tr>
<td>Exams (final)</td>
<td>40%</td>
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About the Requirements:

Outlines and Reports—The readings for this class are difficult. For this reason, I require outlines or summary reports of the assigned readings. This helps me to see how the readings are going for you, and enables you to comprehend the class material and contribute to discussions more effectively. These summaries should also contain your critical thoughts about the readings. In addition, canvassing your summaries of the readings is an excellent way to prepare for the take home exam.

Paper--There will be a 6 page seminar paper. Students are encouraged to select a topic for their presentations that they have special interest in, and build upon these same topics for their papers. (Although they are not required to do it this way).

Presentations and participation—There will be presentations on the readings and on special topics. I will break students into groups of two for these presentations (so that a shy person can do the “behind the scenes” work).

Exam – There will be a final exam (take home, long essay format).

V. CLASS FORMAT

The class will be a mixture of lecture and discussion. We will begin each class with a student presentation on the readings. I hope that you will all have views about the topics we will address, and I want you to express and explore those views. (And by the way, I certainly understand and appreciate admissions of confusion!).

The readings and material are difficult. However, we will also have a few “breaks.” we will have two films (one documentary on robots, bugs, and other things, which is a bit of a cult film, and one sci fi film, Blade Runner).

It is the nature of the issues we will be considering that people's views will differ. You are encouraged to question your classmates (and me) when anyone says something you disagree with. “Minority” opinions are often the most informative ones. For philosophy encourages students to “think outside of the box.”

VI. TOPICS AND READINGS

Readings from the Kim book are listed by a "K" followed by the chapter number (e.g., K3). Page numbers are added when only some of a chapter is assigned.

I. Overview of leading historical and contemporary theories of the mind:

1. Dualism

K1 and K6, pp. 125-132
2. Behaviorism


3. Type-Type Identity Theory and Reduction

K3 and K9, pp. 211-221

II. Functionalism, Computationalism and Modularity: some basics

K4
Block, Ned. "What is Functionalism?" in Block, pp. 171-184. Also
At: http://www.nyu.edu/gsas/dept/philo/faculty/block/papers/functionalism.html
K9, pp. 221-226.
Jerry Fodor, Precis of Modularity of Mind (reserve).

III. Functionalism and AI

Turing, Alan. "Computing Machinery and Intelligence." 1950
Available at: http://cogprints.ecs.soton.ac.uk/archive/00000499/00/turing.html
Ned Block, “The Mind as the Program of the Brain”
At: http://www.nyu.edu/gsas/dept/philo/faculty/block/papers/msb.html
K5

IV. Interlude: Android Rights?
Phillip Dick. Film – Blade Runner (Do Androids Dream of Electric Sheep?)
Recommended: Peter Singer. “All Animals are Equal” (for work on Speciesism, which also addresses AI issues). Reserve.

V. What is the format of thought? The LOT/Connectionism Debate:
Murat Aydede, Language of Thought, Stanford Encyclopedia of Philosophy
Look up at: http://plato.stanford.edu/
Connectionism. Stanford Encyclopedia of Philosophy
http://plato.stanford.edu/
Paul Churchland, excerpts from Engine of Reason, Seat of the Soul (reserve).

Recommended: Cynthia Macdonald, “Introduction: Classicism v. Connectionism” (On reserve)

VI. Beyond Connectionism: Dynamic Systems Theory, Subsumption Architecture, the “Embodied/Embedded” approach and so on.
Andy Clark’s Millenial Perspective on rationality in Mind and Language. (reserve)
Excerpts from Andy Clark’s Being There (reserve)
Eric Lormand’s review of Being There (reserve)
Excerpts from Rodney Brooks, Flesh and Machines: How Robots Will Change Us. (reserve)

Additional assignment: visit the websites at the MIT media center.
Documentary film, “Fast, Cheap, and Out of Control”

VII. Special topics (for joint meetings with the Consciousness Studies class):

1. For the dissection/neuroanatomy class: read excerpt from Gazzaniga, Cognitive Neuroscience (reserve). The dissection is tentatively scheduled for the 26th of January.

2. We will be hosting a roundtable discussion by a panel of experts on the nature of mind, with special emphasis on consciousness and mind. Details: TBA. Assignment: Thomas Nagel piece in Block, pp.159.


Some cool websites:

MIT AI Lab: http://www.ai.mit.edu/
MIT Media Lab: http://www.media.mit.edu/

Ned Block’s Minds and Machines course website:
http://www.nyu.edu/gsas/dept/philo/courses/mindsandmachines/
The above site has tons of good papers.

Alan Turing: http://www.turing.org.uk/turing/

The Turing Test page:
http://cogsci.ucsd.edu/~asaygin/tt/ttest.html#new
Talk to some programs.

Kurzweil net is an incredible resource of popular science papers on AI, nanotechnology, etc.
http://www.kurzweilai.net/index.html?flash=2

The following cite has an extensive bibliography in philosophy of mind and cognitive science, including lots of online papers:
http://www.u.arizona.edu/~chalmers/

Some useful reference works:
Stanford Encyclopedia of Philosophy: http://plato.stanford.edu/