Syllabus

CMPT 265 Cognitive Science

Fall 2011

Classes: Fisher 201, TR 3:00 - 4:25
Instructor: Paul Shields, Fisher 111, (413) 243-0651
Email: pshields@simons-rock.edu
Office Hours: M 3:00 - 4:00, T 1:00 - 1:30, W 3:00 - 3:30, R 4:30 - 5:30, or by appointment
Web Site: http://cs.simons-rock.edu/cmpt265/

Texts

Descartes, *Meditations on First Philosophy*, 1641.


Course Reader.

Description

Cognitive science is the modern, empirically informed study of how the mind works. It is an interdisciplinary field which draws upon the resources of philosophy, psychology, artificial intelligence, neuroscience, linguistics, and anthropology, and covers a broad range of cognitive phenomena, including perception, reasoning, memory, attention, language processing, and problem-solving. We will explore dualism and reductionism, representation-computation models of cognition, neural networks, dynamic systems, emergence, embodied minds, and various criticisms of these approaches. Readings will be taken from the standard literature in the field and from recent research. Prerequisite: Sophomore standing.

Objectives

To introduce students to the history, distinctive problematic, and various research programs of contemporary cognitive science.

To become acquainted with the classic contributions to cognitive science.
To illustrate the connections between the disciplines which contribute to cognitive science, and to provide a background which will support further work in the field.

Requirements

1) Active, informed participation in class discussion.
2) A midterm paper (6 - 8 pages) on some topic from the reading for the first half of the course. Topic choice should be submitted by email a week before the paper is due.
3) A final research paper (10 - 12 pages) that uses material beyond the assigned readings. The topic for the final paper should be submitted by the date listed on the calendar.
4) Two position papers -- one before midterm and one after midterm. Position papers are brief (2 - 3 page) responses to the assigned reading. Students choose which reading to write on and then read their position paper to the class on the day the reading is listed. Students should also be prepared to answer questions and/or lead a brief discussion. I will typically begin each class by asking if there are any position papers for that day. After a paper is presented, I will allow a variable amount of time for discussion of it. Position papers should ideally take a position and explain why one does or does not agree with the author of the reading.

Attendance

The normal college policy on attendance will be followed: 2 absences will result in a warning, 3 or more in possible suspension from the course.

Grading

Final paper -- 40%
Midterm paper -- 30%
Two position papers -- 20%
Class discussion -- 10%