

**Philosophy 256 / Psychology 256****Introduction to Cognitive Science, Winter, 2012****Professor:** Paul Thagard**Office hours** (HH368): TTh 11:30-12:30 and by appointment.**Email:** pthagard@uwaterloo.ca. **Phone:** 888-4567, extension 33594.**Web page:** <http://cogsci.uwaterloo.ca/courses/phil256.html>.**Time:** T, TH, 10:00 - 11:20, AL 211. To improve learning, please turn off all electronic devices such as phones, computers, and transcranial magnetic stimulators. See [blog](#) for reasons.**Textbooks:** P. Thagard, *Mind: Introduction to Cognitive Science*, 2nd edition. P. Thagard, ed., *Mind Readings: Introductory Selections in Cognitive Science*. Royalties from book sales for this course are donated for UW undergraduate scholarships.**Assignments:** Marks will be based on:

- 3 exams: Jan. 26, Mar. 1, Mar. 29. Each is worth 23% of the total mark for the course. Students are responsible for material in the textbooks and on the Web site.
- Essay, due Mar. 15, worth 23% of the final mark. See [essay topics for 2010](#).
- One-minute essays. These will be written at the end of each class and will be worth a total of 8% of the total mark. You can miss 2 of these without penalty.

Description: Cognitive science is the interdisciplinary study of mind and intelligence, operating at the intersection of psychology, philosophy, computer science, linguistics, anthropology, and neuroscience. This course will describe the different methodologies and theoretical contributions of these disciplines to questions such as mental representation, the nature of expertise, and consciousness. It will focus on a fundamental question in cognitive science research: What kinds of representations must be postulated to explain human intelligence or to develop computer intelligence? Is a scientific understanding of mind possible? This course is truly interdisciplinary and students are advised that it is not like conventional philosophy or psychology courses. No prerequisite.

Readings:

Week	Dates	Topic	<i>Mind, ch.</i>	<i>Mind Readings</i>
1	Jan. 3-5	Representation and computation	1	1
2	Jan. 10-12	Logic	2	2
3	Jan. 17-19	Rules	3	3-4
4	Jan. 24-26	Concepts, EXAM 1	4	5
5	Jan. 31- Feb. 2	Analogies	5	6
6	Feb. 7-9	Images	6	7
7	Feb. 15-16	Connections	7	8
8	Feb. 28- Mar. 1	Connections, EXAM 2	8	
9	Mar. 6-8	Brains, Emotions	9-10	9
10	Mar. 13-15	Consciousness, ESSAY	11-12	10-11
11	Mar. 20-22	Environments Dynamic systems	12-13	12-13
12	Mar. 27-29	Future of cognitive science, EXAM 3	14	

Note: Because of surgery, Paul Thagard will be replaced for weeks 7-9 by Eric Hochstein: eghochstein@uwaterloo.ca.