

PSYCHOLOGY 319
Introduction to Cognitive Science
Spring 2008

Instructor: Jeanine Stefanucci
Classes: TR: 12:30-1:50, 119 Millington Hall
Office: 251 Millington Hall
Phone: 221-3898
Email: jkstef@wm.edu
Office hours: T: 2-3pm; W: 1- 2pm; or by appointment

Course Home Page: on Blackboard

Required Text:

Thagard, P. (2005). Mind: Introduction to Cognitive Science, 2nd Edition. Cambridge, MA: MIT Press.

*All other required readings will be available on Blackboard

** You will also need to purchase a personal response system (clicker) from the bookstore for use in class. To enroll in this class, the class key is K34948H187.

Course Description:

This course surveys a variety of theoretical and methodological approaches to the scientific study of intelligent thought and behavior in humans, other animals and machines. We will address questions like: how does the mind work? Can computers be conscious? Does language shape thought? Students will explore possible answers to these questions and others by approaching them from the fields of philosophy, computer science, neuroscience, linguistics and cognitive psychology.

Class meetings:

This class meets from 12:30-1:50 TR in 119 Millington Hall, and it is recommended that you attend each class. Most of the material that is covered in lecture will not be in the text or readings.

Grading:

Grades are based upon the average of two exams, the final, and class participation (as registered by in-class comments and attendance from the personal response system). The final is cumulative plus the last section of the course and is worth two exams. That is, each exam during the semester and the final exam contribute 30% to the final grade, and in-class participation counts for the remaining 10%. All exams are of a short and very short answer format - for example, fill in the blank, label the figure, or answer in a sentence or two. The following exam averages and associated final letter grades will be strictly enforced:

A: 94.0 – 100
A-: 90.0 – 93.9
B+: 87.0 – 89.9
B: 84.0 – 86.9
B-: 80.0 – 83.9
C+: 77.0 – 79.9
C: 74.0 – 76.9
C-: 70.0 – 73.9
D+: 67.0 – 69.9
D: 64.0 – 66.9
D-: 60.0 – 63.9
F: 59.9 and below

Missed exams:

Only under extreme circumstances will make-up exams be given. If you need to take a make-up test, permission must be obtained **prior** to the exam. Failure to do so will cause the missed exam to be graded as a zero. Unless prior arrangements are made, all exams must be taken in the lecture room.

<u>Dates</u>	<u>Topics</u>	<u>Readings</u>
1/17	Introduction	Thagard- Chapter 1
<u>Methodologies of Cognitive Science</u> – Unit I		
1/22	Philosophy	Thagard- Chapter 2
1/24	Cognitive Psychology	
1/29	Neuroscience	Thagard- Chapter 9
1/31	Computer Science	Thagard- Chapters 3, 7
<u>PERCEPTION</u> – Unit II		
2/5	Philosophies of Perception	Thagard- Chapter 6
2/7	Perceptual Psychology	
2/12	Neuroscience of Perception	Sacks- “The Man who Mistook...”
2/14	Computer Modeling of Perceptual Systems	
2/19	EXAM 1	
<u>LANGUAGE</u> – Unit III		
2/21	Linguistic Philosophy	New Yorker- “The Interpreter”
2/26	Psycholinguistics	
2/28	Neuroscience of Language	Pinker- “Language Organs...”
3/11	Linguistic Modeling	
<u>MEMORY</u> – Unit IV		
3/18	Philosophy of Memory	
3/20	Cognitive Psychology of Memory	Thagard- Chapter 4
3/25	Neuroimaging of Memory and H.M.	Sacks- “The Lost Mariner”
3/27	Computational Models of Memory	New Yorker- “The Checklist?”

4/1 EXAM 2

REASONING – Unit V

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|------|---------------------------------|-----------------------------------|
| 4/3 | Philosophy of Reasoning | Thagard- Chapter 5 |
| 4/8 | Psychology of Decision Making | New Yorker- “What’s the Trouble?” |
| 4/10 | Neuroimaging of Decision Making | |
| 4/15 | Models of Reasoning | |

CONSCIOUSNESS – Unit VI

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|------|--------------------------------------|----------------------------|
| 4/17 | Philosophy of Consciousness | Thagard- Chapter 11 |
| 4/22 | Psychological study of Consciousness | New Yorker- “Two Heads” |
| 4/24 | Neuroscience of Consciousness | New Yorker– “Silent Minds” |

4/29 Final Exam 8:30-11:00AM