

**Cognitive Science**, Psychology 430/530  
Mon, Wed 2:00-3:20 p.m., Knight Library Studio A  
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Office hours: Tue 1:00-2:00 p.m. and by appointment  
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Office hours Wednesday 1-2pm  
Blackboard Course ID: [200502.X2862](#)  
WWW Course Page: <http://darkwing.uoregon.edu/~bfmalle/CogSci/>

## Cognitive Science Psychology 430/530

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### Syllabus

- How do we think?
- What is consciousness?
- Are there brain systems dedicated to social interaction?
- How did the mind evolve?
- Is there freedom of the will?

In this course you will learn about research and theories in the interdisciplinary field of cognitive science, which draws on psychology, philosophy, linguistics, evolution, neuroscience, and computer science to help us understand how the human mind works—and how it differs from the minds of other animals and from machines.

Expect to work hard in this course. You will read literature from a variety of disciplines, think about and discuss some difficult problems, and complete a challenging group project. In return for your work you will gain access to an exciting field of science and better understand how humans think and make sense of the world.

### Topics

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What is Cognitive Science?

How do we think?

Rationality

How does emotion differ from cognition?

Consciousness and self-consciousness

Bridging the gap to other minds

How unique is social cognition?

How flawed is social cognition?

Perception and Action

Is there freedom of the will?

What is language? How do people learn and comprehend language?

Language and the brain

Evolution of cognition

Is there artificial intelligence?

Folk psychology

Cognitive or brain science?

Cognitive and social science

Cognitive science of art and music

## Course Components

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**Lecture:** I strive to make class sessions informative, engaging, and thought-provoking. Because we have no textbook, there is no substitute for class sessions, and these sessions represent the second foundation for the course material. If a student's absence is anticipated, I don't object to having the sessions recorded (audio, video) for later viewing.

**Handouts:** Prior to each lecture, a handout will be available on Bb and on the www course page to prepare for the material. However, actual lectures may often deviate from these handouts. Updated handouts that incorporate additional material covered in class will be available within a week of the relevant class session. These handouts provide the third foundation for the course material

**Readings:** Absent a textbook, the original readings provide the first foundation for the material in this course. To prepare for each topic you need to work through the readings before class. You also need to have worked through the readings to answer challenge questions in class (which are part of your participation). Reviewing the articles after class will allow you to integrate lecture material with the readings and prepare you well for the exams.

All readings are available electronically on Bb. If you ever run into problems accessing Bb, I can email you the specific readings. Note that *all* readings are available electronically and only electronically. Try to download the readings when on campus, where we have fast internet connections (some files are several megabytes large). You may request a printout of a particular file if you have trouble downloading it.

**Electronic Resources:** The course encourages active use of electronic resources. A variety of material is available on the Blackboard page and also on the (growing) course web page <<http://www.uoregon.edu/~bfmalle/CogSci>>, including this syllabus, lecture handouts, assigned and further readings, and links to web resources. I also encourage the use of Email throughout the term to complement in-person communication during office hours.

**Exams** cover material from the lectures, discussions, web resources, and readings up to (but excluding) the Exam date. The questions will be in multiple-choice and short-answer format.

If you know you are not able to complete a Exam at a scheduled time (e.g., collegiate athletes' away games), you must talk to me **before** the exam date. In case of unforeseen events such as illness or death of a close relative, special arrangements can be made if documentation is provided. No other exceptions will be made.

I do not tolerate any form of cheating and fail students who cheat.

I will provide study questions before each exam, and Chuck Tate will hold a review session.

**Participation** includes (but is not limited to): verbal questions and discussion contributions in class; short written responses to in-class challenge questions; emailed questions or comments; discussion during office house; term diary (an electronic or handwritten notebook with ideas, questions, musing about course topics).

**Office hours:** I will have office hours on Tuesday 1-2 pm and by appointment. I am also happy to address questions by email, if appropriate. If I don't respond to my email within 3 days please send it again (With several dozen messages each day, I am grateful for reminders.)

Chuck Tate's office hours are Wednesdays from 1-2 pm.

**Reaction Papers and Group Project:** See below

### ***Reaction Papers***

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The purpose of the two reaction papers is to allow each student to demonstrate an ability to critically engage with a specific article, a position, or topic more broadly. Reaction papers are short (4-5 pp.) and concisely written. No more than half of the paper may be devoted to summarizing the article or position that serves as the paper's target; the rest must be devoted to developing analysis, criticism, connections to other topics, expansion, or possible tests of the relevant hypotheses.

Each paper will be evaluated for originality, clarity of thought, backing of one's claims, clarity and correctness of expression, and overall organization.

### ***Group Project***

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You choose the project from a list handed out during the first week of class and thereby join a group of others who are interested in the same topic.

*Possible projects:* A professional book review; an empirical study; an integrative web page; an adult-education poster; a radio or video story.

During week 1 you will join a group of 5-6 students who work together on a specific project during the whole quarter. The group's primary function is to plan and execute the assigned project, but it also serves as a reading and discussion forum, fostering the exchange of questions and ideas about assigned readings and course material.

To monitor group activities, a group leader and a deputy are elected by each group during the first week. They report to me (via email) about group meetings and progress on the project. However, you are responsible *as a group* to make progress on your project and to contact me with any problems.

At the end of the term each member of a group evaluates each other member of that group so that I get consensual evidence for who contributed to the group product and who didn't.

The first email report is due Monday, **January 16**. Thus, you have to meet at least briefly with your group this week to exchange schedules, find a meeting time, and elect your leader and deputy, who then will send me an Email about these first activities.

If you can't find a meeting time for all group members, be creative: split into subgroups that take on different parts of the project; or use phone conferencing, instant messaging, or any other electronic communication systems. Trouble with schedules is not an acceptable reason for lack of progress either of an individual group member or the group as a whole.

### ***Course Performance***

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Course performance is based on numerous components, allowing each student multiple opportunities to show his or her strengths and overall effort. Your final grade is based on the summed points you receive from all assignments: Papers (150 + 200), Exams (150 + 200), Group Project (100 collective + 100 individual), Participation (100). As are 900 and above, Bs are 800 and above, Cs are 700 and above, Ds are 600 and above.

## *Graduate Course*

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Students enrolled in 530 complete all course components outlined above and also write a final scholarly paper. Type, topic, and scope of this paper are settled in discussions with Chuck and me.

## *Communication*

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Because this course is work-intensive from the first week on, it is important that we communicate effectively with each other inside and outside the classroom. Come to class and contribute; see me in my office; make sure that you check your Email and the class web page several times a week. If any problems or issues arise, approach me or Chuck. In my experience, there are few problems that cannot be solved by open and effective communication.

## *Students with Disabilities*

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If you have a documented disability and anticipate needing accommodations in this course, please meet with me soon and bring along your verification letter from Disability Services.

## *Relevant Web Sites*

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Metasite: <http://cogsci.uwaterloo.ca/courses/resources.html>

Cognitive Science Dictionary:

[http://www.bcp.psych.ualberta.ca/%7emike/Pearl\\_Street/Dictionary/dictionary.html](http://www.bcp.psych.ualberta.ca/%7emike/Pearl_Street/Dictionary/dictionary.html)

Glossary of terms: <http://cogsci.uwaterloo.ca/courses/Phil256/glossary.htm>

Academic Programs: <http://www.cognitivesciencesociety.org/graduate/>

Comparative mammalian brain collections: <http://www.brainmuseum.org/>

Thw whole brain atlas: <http://www.med.harvard.edu/AANLIB/>

Cogprints article database: <http://cogprints.ecs.soton.ac.uk/>

Cognitive Science Society: <http://www.cognitivesciencesociety.org/>

Stanford Encyclopedia of Philosophy: <http://plato.stanford.edu/>

Cognitive Science celebrities: [http://carbon.cudenver.edu/~mryder/itc\\_data/cogsci.html](http://carbon.cudenver.edu/~mryder/itc_data/cogsci.html)

Behavioral and Brain Sciences Online: <http://www.bbsonline.org/>

Wikipedia: [http://en.wikipedia.org/wiki/Cognitive\\_science](http://en.wikipedia.org/wiki/Cognitive_science)

Human Evolution website: <http://www.becominghuman.org/>

Block/Nagel Consciousness course:

<http://www.nyu.edu/gsas/dept/philo/courses/consciousness97/>

Thymos (Pierro Scaruffi): <http://www.thymos.com/index.html>

This syllabus is subject to changes.

January 5, 2006