Cognitive Science, Psychology 430/530 Mon, Wed 14:00-15:20pm, Straub 142 Prof. <u>Bertram F. Malle</u>, <u>bfmalle@uoregon.edu</u> Straub Hall 305. Phone: 346-0475. Office hours: Fri 1:00-3:00pm and by appointment *Teaching Assistant:* Tarik Bel-Bahar, tbelbaha@darkwing.uoregon.edu

Cognitive Science Psychology 430

Preliminary Syllabus

- How do we think?
- What is consciousness?
- How did the mind evolve?
- Are there brain systems dedicated to social interaction?
- 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 other animals' minds and machines.

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

Topics

| What is Cognitive Science? | Language II: Acquisition, evolution, |
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| How do we think? | discourse |
| Is affect distinct from cognition? | Evolution of cognition |
| Consciousness | Is there artificial intelligence? |
| Other minds: Elements of social cognition | Cognitive or brain science? |
| Perception and Action | Folk psychology |
| Is there freedom of the will? | Cognitive and social science |
| Language I: Phonetics, syntax, and comprehension | Cognitive science of music and art |

All Readings will be available on the Blackboard course page for downloading. A detailed reading list and schedule will be posted on January 2, but because this course is evolving in its current form, some changes in the reading list are inevitable. Readins are to be completed by the class session under which they are listed.

Grading

Grading is based on two quizzes (15% each), two literature responses (15% each), in-class contributions (10%), and a final group project (30%).

Quizzes cover material from the lectures, discussions, web resources, and readings up to (but excluding) the quiz date. The questions will be in multiple-choice and short-answer format. They will occupy the first 15 minutes of class time on Janary 24 and February 22).

If you know you are not able to complete an 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 failed students in the past who had cheated.

Literature responses are mini-papers (2 pp maximum length) in which you write a critique, analysis, or commentary on one of the class readings; you can also integrate or contrast two readings, o you can expand a paper's point into a new direction. However, do not just summarize the paper; the goal of this assignment is to produce genuine *responses* that reflect your own thinking. You are *strongly* encouraged to write these responses as soon as you have read an interesting, thought-provoking paper; the deadlines (January 31, February 28) are merely the absolute last day you can turn a lit response in.

In-class contributions can come in the form of questions and comments during lecture or during the discussion of the assigned readings. Also, we will sometimes set 5 minutes of class time aside so everybody can write down one major question or issue that came up during the readings, and we will take up some of these issues in class discussion.

Group projects can be chosen by signing up on a list handed out on Wednesday January 5. We will have 9 groups with 6 members each. By signing up for a particular project, you join a group of others who are interested in the same topic, and you are expected to genuinely collaborate with the other group members. Three types of projects will be available: A book review; an integrative web page; an educational poster.

More on Project Groups

The primary function of the group you are going to join is to plan and execute the assigned project, but the group also serves as a reading and discussion forum, fostering the exchange of questions and ideas about assigned readings and class material.

To monitor group activities, a group leader and a deputy are elected by each group during the first week. They report to my teaching assistant, Tarik, about group meetings and progress on the project. I will also be available for guidance and feedback on the group project. Ultimately, however, you are responsible *as a group* to make progress on your project and deliver an exciting and noteworthy product.

The first email report is due Monday, **January 10**. Thus, you have to meet at least briefly with your group during the first week to exchange schedules, find a meeting time, and elect your leader and deputy, who will then send the initial Email to Tarik 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 by an individual group member or the group as a whole. Grading of the group project will take two aspects into account: the quality of the final product (judged by my TA and me), and the member contributions. The latter is based on a round-robin evaluation that each group performs of its own members. That is, each group member has a chance to indicate confidentially how much other group members have contributed to the project. In the past, this procedure has been very helpful in encouraging strong and equal contributions from all group members, and it provides a reliable method to identify occasional freeloaders.

Electronic Resources

The course encourages active use of electronic resources. A variety of material is available on the Blackboard page. There will also be a course web page http://www.uoregon.edu/~bfmalle/CogSci.html that includes most of the same material but not the electronic reader.

Communication

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. In my experience, there are few problems that cannot be solved by open and effective communication.

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

Web sites for further exploration:

Metasite: http://cogsci.uwaterloo.ca/courses/resources.html Academic programs in cognitive science: http://www.cognitivesciencesociety.org/graduate/ Becoming Human (human evolution): http://www.becominghuman.org/ Behavioral and Brain Sciences Online (journal): http://www.bbsonline.org/ Block/Nagel Consciousness course: http://www.nvu.edu/gsas/dept/philo/courses/consciousness97/ Brain anatomy: http://www.vh.org/adult/provider/anatomy/BrainAnatomy/BrainAnatomy.html Brain in disease: http://www.med.harvard.edu/AANLIB/ Cognitive Science celebrities: http://carbon.cudenver.edu/~mryder/itc_data/cogsci.html Cognitive Science Dictionary: http://web.psych.ualberta.ca/%7Emike/Pearl_Street/Dictionary/dictionary.html Cognitive Science Society: http://www.cognitivesciencesociety.org/ Cogprints article database: http://cogprints.ecs.soton.ac.uk/ Glossary of terms: http://cogsci.uwaterloo.ca/courses/Phil256/glossary.htm Stanford Encyclopedia of Philosophy: http://plato.stanford.edu/ Thymos (Pierro Scaruffi): <u>http://www.thymos.com/index.html</u> Wikipedia: http://en.wikipedia.org/wiki/Cognitive science

This syllabus is subject to changes.

January 3, 2005