## MIND and BRAIN (PSY 201) University of Oregon Spring 2009

Instructor:

Dr. Jagdeep Kaur-Bala

Classroom: Prince Lucien Campbell 180

217B Heustis Hall

Time: 2:00-3:20 pm MW

346-4903

jagdeep@uoregon.edu

Office Hours: 10:00 - 11:00 am Monday/Wednesday (& by appointment)

## Lab Instructors:

Kara Braun, STB 349 (x6-8037), <a href="mailto:kara@uoregon.edu">kara@uoregon.edu</a> Office Hours: Wed 12-2pm

Shannon Peake, STB 483 (6-4902), <a href="mailto:peake@uoregon.edu">peake@uoregon.edu</a> Office hours: Tue 2-4 pm.

Curtis Suver, STB 252 (6-0839), <a href="mailto:suver@uoregon.edu">suver@uoregon.edu</a> Office Hours-to be determined

Daniel Jaster, STB 252 (x6-0132), <a href="mailto:jaster@uoregon.edu">jaster@uoregon.edu</a> Office Hrs: Fri 1-2pm & 3-4pm

Christina Gamache Martin, STB 323(x6-4902), <a href="mailto:gamachem@oregon.edu">gamachem@oregon.edu</a> Office Hrs: Thu 1-2 & 3-4pm

## Research Instructor:

Jessica Murakami, STB 335(6-2921), imurakam@uoregon.edu Office Hours:

Course website: <a href="http://blackboard.uoregon.edu">http://blackboard.uoregon.edu</a> <a href="PSY 201 (Spring 2009; 34744">PSY 201 (Spring 2009; 34744</a>), <a href="Mind and Brain">Mind and Brain</a> <a href="Psi 2009">Please be sure to check this site often for announcements and course materials. This site will provide supplemental information for the course (additional readings, homework assignments, lab materials, syllabus, course schedule, grades, copies of lecture slides/overheads, etc.). <a href="Psi 2009">Please notify me if you have difficulty logging into the site.">Please notify me if you have difficulty logging into the site.</a>

**General Course Description:** This course covers different experimental approaches to the study of the human mind and brain. Topics covered include the organization of the nervous system, sensation, perception, attention, learning, memory, and cognition.

**Required Text:** *Psychological Science* by Michael S. Gazzaniga and Todd F. Heatherton, 2<sup>nd</sup> edition is required. Please notify me immediately if you have difficulty obtaining the text from the bookstore.

Course Format: The material in this course will be presented through a combination of assigned readings from the text, class lectures, in-class discussions, and demonstrations. In addition, laboratory sessions will be used to include experimental research methods. Lecture material and readings will have some overlap, but will not be replications of each other; some lecture material will not be covered in the readings and vice versa. You are expected to do the assigned reading *before* the class period in which it is due. Reading the material before the corresponding lectures will help your performance. Discussions of the material during lecture will be more fruitful if you have at least a general understanding of the material beforehand, helping you to ultimately comprehend and retain the material. Each of the non-lecture parts of the course (discussions, texts, presentations, movies) are designed to reinforce ideas and augment concepts presented in lectures. Questions are encouraged in all parts of the course and students are welcome to stop by my office for questions and/or discussions during my office hours or additional appointments. It is my hope that by the end of this course you will have a new appreciation for how you interact with the world (and how it influences your behavior).

**Grading:** Your final grade will be based on <u>4 Exams</u> (60% total), the <u>Lab grade</u> (30%), and the <u>experimental subject obligation</u> (10%). The grades for each exam and for the Lab are determined on a curve. The final grade is an average of performance on the best 3 of the 4 exams (your lowest score will be dropped; each of the remaining 3 exams will count for 20% of your grade), the lab grade (which counts for 30% of your grade), and the research requirement (10% of your grade). You must complete all exams, the Lab section, as well as your experimental subject obligation (see "Psychology Department Research Requirement") in order to receive credit for the course.

**Exams (60%):** There will be 4 multiple choice examinations. Each exam will cover material from the lectures and reading assignments for the period immediately preceding the exam. No overall comprehensive final exam is required. *No makeup exams will be given.* It is to your benefit to take all the exams. However, if you miss an exam for a legitimate reason (e.g., you are sick) and take the other 3 exams, the score for the missed exam (0%) will be dropped from the average. A make-up exam will be given only in the rare event that you miss 2 exams and have a legitimate excuse for both absences. In this case, you will need to present documented excuses (e.g., doctor's excuse, court order, executive order!) for *both* missed exams in order to make up the second missed exam.

As an additional incentive to take all 4 exams, 2 points will be added to your final score if all 4 exams have been completed each with a score of 50% or higher.

**Lab/Discussion Sections (30%):** Part of the requirement for the course is to participate in lab sections. Each week an experiment/demonstration will be performed that will elaborate on some of the class material. *There are no labs scheduled during the first or last week of classes.* You will receive a lab syllabus and description of lab requirements in your lab section.

Psychology Department Research Requirement (10%): The psychology department requires that all students enrolled in introductory courses (201 and 202) participate in psychology research (*if you do not complete this requirement, you will receive an Incomplete for the course*). Specifically, you are required to participate in 4.5 hours worth of experiments, over the course of the term. More information about this requirement will be provided in discussion sections -- you will be given a separate handout with more details. It is a good idea to complete your research requirement as early in the term as possible, since experiments are sometimes hard to find later in the term. If you do not wish to participate in experiments, you may write a research paper instead. See your lab instructor to arrange for this option before *Friday, May 1*<sup>st</sup>. More information and guidelines for your research paper will be provided by your TA individually to you, if you choose this option.

In either case, you are required to complete your research requirement by *Friday, June 5th*.

What about extra credit? You can earn <u>up to 4 points</u> in extra credit in various ways (see below). These points will be added to your final grade at the end of the class. So, if you get an 80% with all of your work, and you do 4 points of extra credit, your final score will be 84%. You may:

- Attendance is taken in a small, random subset of the classes and is awarded extracredit. [1-2 points].
- Occasional optional homework assignments will be given to help dig deeper into the concepts discussed in class. [1-2 points]
- Students who take all 4 exams (see 'Exams', above), will be awarded extra-credit if each of the 4 exams is completed with a score of 50% or higher. [2 points]

**Due Dates:** All due dates are contained in the course outline. An assignment turned in after its deadline will be marked down 5% for each day late.

**Students with Disabilities:** If you have a documented disability and anticipate needing accommodations in this course, please make arrangements to meet with the instructor as soon as possible. Also, please request that the Counselor for Students with Disabilities (Molly Sirois, <a href="mailto:sirois@uoregon.edu">sirois@uoregon.edu</a>, tel. 346-1073, TTY 346-1083) send a letter verifying your disability.

**Students for whom English is a Second Language:** If you are a non-native English speaker and think you may have trouble in this course due of language difficulties, please see the instructor as soon as possible to make special arrangements.

Academic Honesty: All work submitted in this course must be your own. For the consequences of academic dishonesty, refer to the Schedule of Classes published quarterly. Violations will be taken seriously and are noted on student disciplinary records. If you are in doubt regarding any aspect of these issues as they pertain to this course, please consult with the instructor before you complete any relevant requirements of the course. (For more information, see the UO web site regarding academic honesty at: http://darkwing.uoregon.edu/~conduct/).

Course Outline: This is only a working draft of the course outline; it will be revised as the term progresses. Dates on which particular topics are to be presented in lecture are subject to change, as are reading assignment due dates; however, I will not change the dates of exams or other deadlines unless absolutely necessary. The official updated version of the

outline will reside on the Blackboard web site. Version Updated: 3/14/2009 12:16 PM

Date	Topic	Readings Book chapters (focus pages)
30-Mar	Syllabus and Introduction	Ch. 1 (20 -33)
1-Apr	Research Methods	Ch. 2 (37-70)
6-Apr	The Nervous System - Neurons and How they work	Ch. 3 (87-113)
8-Apr	Organization & Development of the Nervous System	Ch. 4(120 – 140)
13-Apr	Exam #1	
15-Apr	Sensation – Psychophysics, Sensory processes	Ch. 5 (159 -172)
20-Apr	Sensation – Visual system	Ch. 5 (172 -181)
22- Apr	Perception - Object Perception	Ch. 5 (182 -192)
27- Apr	Perception - Depth, Motion & Size Perception	Ch. 5 (192-200)
29- Apr	Exam #2	
4-May	Attention & Consciousness	Ch. 5 (200 -206); Ch. 4 (140 -146)
6-May	Learning & Reward	Ch. 6 (212 - 243) RER 1 due@ midnight May 8 <sup>th</sup>
11-May	Plasticity & Memory	Ch. 7 <i>(251 - 275)</i>
13-May	Language/ Brain Development	Lecture slides & class notes (Ch.11 for ref.)
18-May	Exam #3	
20-May	Cognition	Ch. 8 (294 - 336)
25-May	No class	(Memorial Day!) RER 2 due @ midnight May 22 <sup>nd</sup>
27-May	Brain & Behavior	Lecture slides & class notes (Ch.8 for ref.)
1-June	Disorders of the Mind & the Brain	Lecture slides & class notes (Ch.13 for ref.)
3-June	Exam #4	
5-June		Deadline for completing research participation. RER3 (optional) due @ 4:00 pm Term Paper due @ 4:00 pm
10-June	NO final exam	(Makeup exam, if necessary)

## Research Participation Guidelines - Mind and Brain (PSY 201-Spring09)

Instructor: Jagdeep Bala – 238C Huestis Hall, (x6-4903) jagdeep@uoregon.edu
Research Instructor: Jessica Murakami - 335 Straub (x6-2921) jmurakam@uoregon.edu
(10% of total grade)

There are **two** options for completing the **research requirement** in this course:

1. You may participate in the Psychology Department's Human Subjects Pool and get experience as a subject in actual psychology experiments. Students and faculty run many experiments on varied topics (e.g., attention, memory, social interaction). An important part of the introduction to psychology is the understanding of how research is conducted and a partial perspective on this can be gained by participating in research as a subject. To participate in experiments, you will need to sign up on an electronic bulletin board at:http://uopsych.sona-systems.com/.

When you go to this site, there will be an option for you to request a username and password. Once logged in, you will find a list of studies that are available to you, as well as when and where these studies take place. After participating in a study, you will be electronically credited for the time allotted for that study. You need to complete 4.5 hours (not necessarily the same thing as 4.5 studies!) of experimental credit by no later than 4 pm on Friday, June 5<sup>th</sup>, 2009.

In order to encourage you to understand the researchers' methods and hypotheses, you will need to complete a *Research Experience Report (RER)* electronically on Blackboard after participating in 2 of the studies you do. Each RER counts 5% toward your grade (10% total). The first RER must be completed by midnight on Monday, May 8<sup>th</sup>, 2009 (or else you will get 0% credit). The second RER must be completed by midnight on Monday, May 22<sup>nd</sup>, 2009 (or else you will get 0% credit). As long as you have completed at least 2 RERs by May 29<sup>th</sup>, you will have the option of completing one more RER by midnight on *Friday, June 5, 2009*, and if you do so, you can drop your lowest RER score. Please note that even though you only need to complete RERs for 2 studies, you must complete 4.5 credit hours of studies in order to complete this requirement. More details about participating in research studies will be provided in class and you can read more at: <a href="http://www.uoregon.edu/~hscoord/hs-students.html">http://www.uoregon.edu/~hscoord/hs-students.html</a>

If you encounter any technical problems while trying to complete this assignment on the web (either signing up for experiments or completing the RERs), please contact the human subjects coordinator via e-mail (hscoord@uoregon.edu).

2. Students who do not wish to participate in experiments have the option of writing a research paper instead. This paper needs to integrate information from four different published journal papers provided by your TA. If you wish to pursue this option, you must contact your teaching assistant by the **fifth week** of class for instructions and guidelines (**Friday, May 1**<sup>st</sup>). This assignment should take you just as long as the research participation option--6.5 hours (corresponding to 4.5 hours of experiments, and one hour for each required RER), and will be graded to the same standards. Your grade on this paper will substitute the grade you would have received for answering the questions about the research studies (10% of final grade). **The paper should be mailed to** <u>imurakam@uoregon.edu</u> **no later than 4 pm on Friday, June 5<sup>th</sup>, 2009**. Please put the subject of your mail as: PSY201 RESEARCH PARTICIPATION PAPER FOR \_\_\_\_\_\_(your name).

Failure to fulfill the research requirement will result in an "Incomplete" grade for this class. In order to have this Incomplete changed to the grade you earned in class, the missing experiments have to be completed within one quarter of the end of this class. After that time, incomplete grades will be changed to no pass. For experiments you did not complete during the class term, there will be no opportunity for participating in graded RERs.

To avoid an incomplete, please begin early in the term with the experiments. Please be aware that scheduling your participation also depends on the number of studies available at different times during the term. In the past, students who began late have often encountered scheduling problems and have been unable to do all the experiments.