MIND and BRAIN (PSY 201) Fall 2011 University of Oregon

Instructor: *Dr. Jagdeep Kaur-Bala* 213A(*door* 217!) Heustis Hall 346-4903 jagdeep@uoregon.edu Office Hours: 1:30pm - 3:00pm Tuesday/Thursday (& by appointment)

Teaching support: GTFs are also available to help students. **Junaid S Merchant**, 337 Straub Hall, Off. Hrs: 2pm – 3pm & by appt. junaid@uoregon.edu

This syllabus is rather long, read it all!! Familiarizing yourself with the course requirements will be one key to success in this class!

Course website: http://blackboard.uoregon.edu PSY 201 (Fall 2011; 15514), Mind and Brain

The course will be managed through **Blackboard**. All registered students have access with their UO computer account username and password. Please be sure to check this site often for announcements and course materials. This site will provide supplemental information for the course (syllabus, course schedule, additional readings, homework assignments, grades, copies of lecture slides/overheads, etc.). If you have problems accessing your blackboard account, please contact the Information Technology Center in Knight Librarv (http://libweb.uoregon.edu/kitc/, phone: 346 2681). .

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 and Materials: *Psychological Science* by Michael S. Gazzaniga, Todd F. Heatherton and Diane Halpern(*GHH*), 3rd edition + ZAPS Online Labs Access is required. In addition to the textbook, you will require an **iClicker** and **access to the online ZAPS labs**, from WW Norton. These can be acquired as a package or separately, if you already have the text. If you have used ZAPS labs in a previous term this year (for Psy202) you do not need to purchase it again. Please notify me immediately if you have difficulty obtaining any of these materials from the bookstore.

A copy of the textbook will be available on reserve at the Knight library.

Course Format: The material in this course will be presented through a combination of assigned readings from the text, class lectures, in-class discussions, videos and demonstrations. Experimental research methods will be included for all discussion topics through in-class experiences, with ZAPS labs and through self-study lab assignments. Lecture material and readings will have some overlap, but will not be replications of each other; often, significant parts of the readings will not be discussed in class and some new or detailed materials that are not included in textbook readings will be presented in class. You are expected to do the assigned reading **before** the class period in which it is due. This will make class discussions more fruitful, helping you to ultimately comprehend and retain the material. Non-lecture parts of the course (labs, discussions, texts, presentations, movies) are designed to reinforce ideas and augment concepts presented in lectures. Questions are encouraged in all parts of the course. Students are welcome to stop by my office for discussions/ questions/clarifications during my office hours or additional appointments. I am available to answer questions via email; all emails received by 9pm will be answered the same day, those received later, may be answered by midday the following morning. 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>3 of the 4 Exams</u> (60% total), the <u>Lab grade</u> (25%), the <u>Research participation requirement</u> (9%) and class participation (6%). The final grade is cumulative of performance on the best scoring 3 exams (your lowest score will be dropped; each of the remaining 3 exams will count for 20% of your grade), the lab grade (Best 10 labs count for 25% of your grade), the research requirement (2% for each hour of research experience) and class attendance (6%). You must complete all exams, the Labs, as well as your experimental subject obligation (see "Psychology Department Research Requirement" addendum at the end of this syllabus) in order to receive credit for the course. The course will be graded on a curve, if needed. Based on past experience, typical grade cutoffs are 90-100 for an 'A', 80-89.9 for a 'B', and so on. Scores in the upper and lower third of each grade range will be awarded a 'plus' or a 'minus' respectively.

It is anticipated that you will need to spend a substantial amount of time outside of class to do well in this course. It may be helpful to check out the Psychology Department's "Best Practices for students" webpage at: http://psychweb.uoregon.edu/guidelines/students.htm

Exams (60% of final grade): There will be 4 multiple choice type 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. 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 final. <u>Ordinarily, NO makeup exams will be given</u>. A make-up exam will be given only in the rare event that you miss 2 exams and have a legitimate excused absence for both. If you miss an exam, you will need to present a documented excuse (e.g., doctor's note, court order, executive order!) <u>immediately</u> after each missed exam to be allowed to take the make-up exam.

As an additional incentive to take all 4 exams, 1% point will be added to your final score if all 4 exams have been completed, each with a score of 50% or higher.

Labs (25% of final grade): Part of the requirement for the course is participation in labs, both in-class and online. On-line or in-class experiments and demonstrations will form the focus of labs that will elaborate on some of the class material. Labs may be ZAPS or non-ZAPS. The non-ZAPs may require offline work. Instructions for each lab are posted on Bb. Each lab is accompanied by a quiz/feedback homework assignment that should be completed for full credit. All lab instructions, assignments and due dates will be posted on Blackboard. <u>All lab assignments for the week are due by midnight on Friday of that week, at which time they become unavailable on Bb</u>. Total scores for your best 10 labs will count for 25% of your final grade. Students who complete all 13 labs, with a score of 50%, or higher, will be awarded 2% points of extra-credit.

Psychology Department Research Requirement (9% of final grade): The psychology department requires that all students enrolled in introductory courses (201 and 202) get 4.5 hours of research experience. Students may get valuable research experience by participating in Psychology and Linguistics departments' human subject pool. You will need to participate for 4.5 hours worth of experiments, over the course of the term. To participate in experiments, you can sign up on an electronic bulletin board at: <u>http://uopsych.sona-systems.com</u> More information about the Human subject pool will be provided in class as an addendum to this syllabus and posted on Blackboard. An alternate research assignment will be provided for students who do not wish to participate in experiments. These students may fulfill the research requirement by reading research articles to gain knowledge of research methods. You will need to read 4 research articles and summarize the research you have read about in two 2-hour sessions. To participate in this option you will need to sign up with your GTF for two of the prescheduled sessions through the term. More information and the reading list of research articles will be provided by your TA individually to you, if you choose this alternate assignment.

Students who do not complete their research requirement will be awarded an '*incomplete*' for the course. To avoid an incomplete, please schedule sessions early in the term. 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.

In either case, you are required to complete half of your research requirement (2 hours of participation) by the midnight on **Friday of week 5** and the second half of your research requirement by midnight on **Friday of week 10**.

Class participation (6% of final grade): You can earn <u>up to 6 points</u> of credit for participation in class discussions and activities. Attendance will be collected using iClickers. Please be aware that opportunities for class participation are randomized across classes and during each class. *It is to your benefit to come to all classes, reach class on time and stay till class is dismissed!* iClickers are also used for participation in class demos and labs and may account for part of the credit for those assignments. In addition, I will often ask you to respond to multiple-choice questions by using your iClickers. While your responses will not count towards your grade, some of these questions will appear in the exams (sometimes in a slightly changed manner). Thus, it is a good idea to pay close attention to these practice quiz questions! As such, <u>you are required to bring your clicker along to each class</u> to get full participation credit. Documented excused absences will be awarded participation credit, <u>provided you make an effort to make up class materials and discussions with me or your TA</u>.

<u>**Illnesses**</u>: The University is working hard to reduce the likelihood of a wide-spread on-campus flu epidemic. If you are experiencing flu-like symptoms, you are encouraged not to attend class until you believe that you are no longer contagious. I will make every effort to help you make up lost class time electronically via online posting of lectures. For more detailed suggestions and advice about preventing the spread of the flu virus, in particular, the N1H1 flu virus, please see: <u>http://em.uoregon.edu/h1n1/</u>

What about extra-credit? Students who take all 4 exams will be awarded 1 point of extra-credit if each of the 4 exams is completed with a score of 50% or higher. Students who complete all 13 labs will be awarded 2 points of extra-credit. All extra-credit accrued will be added to your final score at the end of the term.

Due Dates: All due dates are contained in the course outline. Due dates for assignments and exams are not changed, except in very rare cases where they may be extended (but never forwarded). 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 me as soon as possible. Also, please request that the Counselor for Students with Disabilities (Molly Sirois, <u>sirois@uoregon.edu</u>, 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 language difficulties or need assistance, please see me as soon as possible to make special arrangements.

Academic Honesty: <u>Cheating will NOT be tolerated in any form in this class.</u> All work submitted in this course must be your own. For the consequences of academic dishonesty, refer to the Schedule of Classes published quarterly. If your responses on assignments are suspected of plagiarism or if a proctor has any reason to be uncomfortable about your conduct during a test, they may ask you to move seats, confiscate your test and/or mark an "F" for that test/assignment. All 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 instructors 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: 9/22/2011 7:55 PM

Date	Topic	Readings Book chapters	Assignments - All labs and RERs are <u>due @ midnight</u> <u>on Friday</u> of the week
27-Sep	Syllabus and Introduction	Ch. 1 <i>(15 -30)</i>	
29-Sep	Research Methods	Ch. 2 (33-73)	Practice Lab (not graded) Research methods
4-Oct	Brain structure and function I	Ch. 3 <i>(92-130)</i>	Lab #1 Synaptic transmission video
6-Oct	Brain structure and function II	Lecture slides & class notes	Lab #2 <u>ZAPS</u> : Split brains
11-Oct	Exam #1; Sleep		
13-Oct	Mind and Consciousness	Ch. 4 <i>(all)</i>	Lab #3 Sleep-memory connection
18- Oct	Sensation – Psychophysics, Sensory processes	Ch. 5 <i>(179 -212)</i>	Lab #4 ZAPS: Signal detection
20- Oct	Perception – Visual Perception	Ch. 5 <i>(213 -231)</i>	Lab #5 <u>ZAPS</u> : Visual search
25- Oct	Perception – Object recognition, Depth, Motion & Size Perception	Lecture slides & class notes	Lab #6 <u>ZAPS</u> : Ames & Ponzo illusions
27- Oct	Exam #2; Learning		2 hours of research participation due
1- Nov	Learning, Reward & Motivation	Ch. 6 (235-268; Class notes)	Lab #7 <u>ZAPS</u> : Classical conditioning
3- Nov	Plasticity	Ch. 6 (268-275; Class notes)	Lab #8 <u>ZAPS</u> : Implicit learning
8- Nov	Attention & Memory	Ch. 7 <i>(279-305)</i>	Lab #9 <u>ZAPS</u> : Spatial cueing
10- Nov	Memory	Ch. 7 <i>(305-325)</i> Additional <i>class notes</i>	Lab #10 <u>ZAPS</u> : Memory span
15- Nov	Exam #3; Cognition I		
17- Nov	Cognition II	Ch. 8 <i>(331-356)</i>	Lab #11 <u>ZAPS</u> : Mental rotation 2D <u>&</u> 3D
22- Nov	Thinking & Intelligence	Ch. 8 <i>(</i> 356 - 375)	Lab #12 <u>ZAPS:</u> Missionaries and Cannibals
24- Nov	No class - Thanksgiving Day!	Additional class notes.	
29- Nov	Disorders of the Mind and Brain		Lab #13 <u>ZAPS:</u> Decision making
1- Dec	Exam #4		2 hours of research participation due
5-Dec	NO final exam	(Makeup exam, if necessary)	