

**MIND and BRAIN (PSY 201) Spring 2012  
University of Oregon**

Instructor: **Dr. Jagdeep Kaur-Bala**  
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346-4953  
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Classroom: **150 Columbia**  
Time: **4:00pm–5:50pm MW**

**Office Hours: 10:00am - 11:30am Tuesday/Thursday** (& by appointment)

**Teaching support:** *GTFs are also available to help students.*

**Arielle Morganstern**, 375 Straub Hall, Off. Hrs: Fridays, 12pm – 1:30pm & by appt. [ariellem@uoregon.edu](mailto:ariellem@uoregon.edu)

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***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 (Spring 2012: 35506), 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 Library (<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**), 3<sup>rd</sup> 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 3 of the 4 Exams (60% total), the Lab grade (25%), the Research participation requirement (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. Ordinarily, NO makeup exams will be given. 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!) **immediately** 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 handed out in during class and posted on Bb. Each lab is accompanied by a homework assignment and quiz, that need to be completed for full credit. All lab instructions, assignments and due dates will be posted on Blackboard. All lab assignments for the week are due by **midnight on Friday** of that week, at which time they become unavailable on Bb. **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 human subjects pool experiments**, over the course of the term. To participate in experiments, you can sign up on an electronic bulletin board at: <http://uopsych.sona-systems.com> 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 pre-scheduled 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 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 up to 6% of total 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, you are required to bring your clicker along to each class to get full participation credit. Documented excused absences will be awarded participation credit, provided you make an effort to make up class materials and discussions with me or your TA.

**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. *The University of Oregon is working to create inclusive learning environments. Please notify me if there are aspects of the instruction or design of this course that result in disability related barriers to your participation. You are also encouraged to contact the Accessible Education Center (formerly Disability Services) in 164 Oregon Hall at 346-1155 or [uoaec@uoregon.edu](mailto:uoaec@uoregon.edu).* Also, please request that an AEC adviser to send a letter verifying your disability and accommodation needs.

**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. I do not allow *electronic* translators/dictionaries during tests but you may use an unmarked paper dictionary as long as you notify me and/or your GTF before the test.

**Academic Honesty:** Cheating will NOT be tolerated in any form in this class. 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**

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

## Research Participation Guidelines - *Mind and Brain (PSY 201-Spring'12)*

Instructor: **Jagdeep Kaur-Bala** – 307 Straub Hall, (x6-4953) [jagdeep@uoregon.edu](mailto:jagdeep@uoregon.edu)

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**Arielle Morganstern**, GTF, [ariellem@uoregon.edu](mailto:ariellem@uoregon.edu)

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### Research experience requirement: (9% of total grade)

An important part of introduction to psychology is the understanding of how research is conducted and I believe that the best way for you to gain valuable perspective on this is through participating in research as a subject and experiencing firsthand, some of the high quality psychology research being conducted at the University of Oregon. Psychology and Linguistics researchers run many experiments on varied topics (e.g., psychological coping, attention, memory, social interaction, etc.) that you may participate in through the term.

To participate in experiments, you will need to sign up on an electronic bulletin board at: <http://uopsych.sona-systems.com>. When you sign up for the first time, 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 (a few can be completed online). 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. Studies range in length from ½ hour to 2 hours or longer. One hour of research participation = 1 credit = 2% of your final grade.**

More details about participating in research studies will be provided in class, posted on Blackboard and you can read more at: <http://www.uoregon.edu/~hscoord/hs-students.html>. 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](mailto:hscoord@uoregon.edu)). You can also find more information in the *HSIntro presentation* on blackboard in the course documents section.

**IMPORTANT PARTICIPATION ISSUE:** *Note that if you fail to show up to TWO studies without good reason, you will not be allowed to participate in further studies to meet your Research Participation requirement, and will, instead, be forced to complete the alternate assignment to meet your Research Participation requirement and to receive a grade for the course.*

**Alternate assignment:** For ethical reasons, the university and I can neither force you to participate in research studies, nor would we wish for you to be uncomfortable participating in studies. Also, participants in the human subject pool need to be 18 yrs or older. For these reasons, there is an alternative assignment that you can choose to do instead. The alternate assignment requires you to spend equivalent time in reading and summarizing empirical psychology research. This will involve signing up in advance for pre-scheduled 2-hour timeslots with your GTF, following which you will come to the Psychology Department to read psychology research articles and write an essay about them. There is also a ½ hour tutorial you can complete, so that doing two of the article reading sessions plus the tutorial will equal the same 4.5 hours of time as participating in studies. For more details about completing this alternative, please contact your GTF.

**All students must complete the research requirement to get a grade in the course.** If you do not complete the requirement, you will receive an incomplete in the course until you do. If you do not complete the requirement within a year, the incomplete will be changed to a failing grade in the course, as required by the university registrar. *To avoid an incomplete, please begin early in the term with the experiments.* Two of the 4.5 hours of the research requirement must be completed by midnight on **Friday of week 5**. The other 2.5 hours must be completed by midnight, **Friday of week 10**. **PLAN AHEAD:** To complete the research requirement, you must schedule your hours in advance. *Please be aware that scheduling your participation also depends on the number of studies available at different times during the term.* A failure to schedule timeslots for completing the research requirement in time for both the Oct. 28 and Dec. 2 deadlines will result in a permanent loss of the points in the course. **In the past, students who began late have often encountered scheduling problems and have been unable to complete participation.**

If you find yourself needing to do a **combination** of the 2 options, **you must meet with me to obtain permission.** 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 year** of the end of this class. After that time, incomplete grades will be changed to no pass.