

COGNITION (PSY 305) Fall 2017 CRN: 15279
SYLLABUS
University of Oregon

Instructor: *Dr. Jagdeep Kaur-Bala*
225 Straub Hall
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Classroom: *145 Straub Hall*
Time: *10:00am–11:20am TR*

Office Hours: *11:30am - 12:30pm Tuesdays and Thursdays (& by appointment)*

Teaching support: *Graduate teaching assistants are also available to help students.*

Yasu Tanaka – ytanaka2@uoregon.edu

Office Hours: *003 STB, 2-3pm Tuesdays/Thursdays & by appointment.*

Jordan Livingston – jlivings@uoregon.edu

Office Hours: *229 LISB, 1-3pm Wednesdays & by appointment*

REQUIRED READING: *Cognition: Exploring the Science of the Mind* by Daniel Reisberg. 6th edition; Norton Publishing Company. This is a comprehensive text for the course and can be purchased new or used through the bookstore. 2 copies of the textbook are also available on reserve at the Knight Library. We will NOT be using the ZAPS labs for this course. These online labs come packed with new copies of this textbook. You are welcome to explore them if you haven't already worked with them in PSY201.

Additional readings: All additional readings will be posted on Canvas.

COURSE WEBSITE: This course is managed through **Canvas**: <https://canvas.uoregon.edu/courses/94175>
Canvas will provide supplemental information for the course (additional readings, course outline, grades, copies of class notes, assignments, etc.). It is in your best interest to check for updates frequently and stay connected.

COURSE DESCRIPTION: Cognitive psychology is the study of mental processes spanning low level sensory processes to higher level thinking. The course will examine key issues in cognition, various perspectives and models of cognition, as well as fundamental methods (such as experimental methods, data interpretation, neural correlates) will be introduced to familiarize students with the process of scientific reasoning. Overall the subject matter of the course will be relatively broad covering much of the current knowledge on cognition. Major topics addressed in this class are issues in cognitive psychology and cognitive neuroscience, interdisciplinary fields of study attempting to answer complex questions about the functions of our minds (and brains) – perception, attention, memory, reasoning, problem solving and decision making. This is a science course. Focus is on theory and data in mainstream cognitive psychology while also making contact with research in other areas.

EXPECTED LEARNING OUTCOMES: The student who successfully navigates this course should have gained knowledge about the major findings and principles of the field, an ability to use the vocabulary, as well as an understanding of the various areas of human cognition. Students in this course will

1. Examine core constructs that make up the cognitive system and to understand the contexts in which these different cognitive constructs are needed.
2. Explore competing theories and perspectives on cognition including various mechanistic and neural theories/perspectives.
3. Develop skills in reading, evaluating, and synthesizing research in cognitive psychology. We will include readings and discussions of the methods used by scientists to examine questions related to thinking (logical, or otherwise!). Discussion, critique and writings based on empirical research in the field are an important part of this course.
4. Apply knowledge regarding cognitive psychology to both formal and informal observations of humans in different contexts (laboratory and real-world settings).
5. Communicate clearly and effectively about psychological topics, including methodological and ethical issues in psychology, based on an understanding of both the strengths and limitations of empirical evidence.

STUDENT WORKLOAD: When you complete this course, you will earn 4 credits toward your degree. Four credits is the equivalent of 120 hours of work across the term. Along with the 3 hours spent in class each week you should plan on spending an average of 9 additional hours each week completing assignments. The bulk of the work comes from reading the text and articles (30-35 hours total, 40-80 pages a week), completing

assignments (25-30 hours total), and studying for midterms and final (25-30 hours). This is a fast paced class and you should plan on scheduling regular intervals of time for studying/assignments outside of class.

HOW TO USE THIS SYLLABUS: This syllabus contains most of the information that you need for understanding how the course is organized. I will not take up your time by going over all of the material in the syllabus in class. *This syllabus is rather long, please read it all and make sure that you understand it!!* *Familiarizing yourself with the course format and requirements will be one key to success in this class!* If you have a question, please be sure to check the syllabus yourself first and if you still need information, by all means ask.

COURSE FORMAT: The material in this course will be presented through a combination of assigned readings, class lectures, in-class discussion, and demonstrations. Please note that some class materials (videos, demos, etc.) will not be available outside of class due to copyright and intellectual property laws. You are expected to do the assigned reading before the class period in which it is due. Lecture material and readings will have overlap, but will not be replications of each other; some lecture material will not be covered in the readings and vice versa. Each of the non-lecture parts of the course (discussions, readings, papers, presentations) 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 clarifications and/or discussions during my office hours or additional appointments, and equally welcome to see the Graduate teaching assistants. It is my hope that by the end of this course you will have a new appreciation for how humans think, make judgments and interact on a daily basis.

COMPONENTS OF THE COURSE GRADE: Final grades are based on consistent performance through the term. As such, the final grade will include the weighted scores for the quizzes, the term papers, study group discussion responses and the exams. In addition, some opportunities for extra-credit will be available to all.

- **Quizzes** – highest- scoring 4 (of 6 total) quizzes form 20% of final grade
- **Exams** – 55% of final grade.
- **Term Paper** – 15% of final grade
- **Study group discussion responses** - 10% of final grade
- **Extra-credit (optional)** - up to 4 points may be added to final grade

Letter grades will be determined by a default grading scale: A (90-103% of total possible points), B (80-89%), C (70-79%), D (60-69%), F (0-60%). Scores in the upper and lower third of each grade range will be awarded a 'plus' or a 'minus' respectively (e.g. 80-83.33 a 'B-', 83.34-86.66 a 'B' and so on). Typically, grades are not curved. However, I reserve the right to relax (but not stiffen) this criterion for final grade assignments, depending on the actual distribution of scores in the class.

Criteria used in making grading decisions:

- Please see the psychology department guidelines for a description of the type of achievement that each grade signifies: <http://psychology.uoregon.edu/courses/departments-grading-standards/>
- **As a general principle, I will never work harder for your grade than you do.** Students who have poor attendance should not expect me to "make up" points for them. Students who have done everything in their power to do their best can be assured that will be carefully considered in making any borderline decision. I try to apply consistent standards and treat students fairly, as well as fulfill my responsibilities to U of O in making difficult decisions about grades.

Grading problems: If you feel there has been an error in working out your grade please let me know as soon as possible. Work out your grade as described above and specify the reason for your concern when contacting me. I want you to get every point you have earned. If you are unhappy with your final grade but agree that it has been worked out correctly as described above, please don't ask for a better grade, or extra opportunities to make a better grade, as a "favor" at the end of the semester. I consider such requests unfair to others in the class and always answer with a "no".

TESTS

Quizzes: (20%)

Short quizzes will be given in the first 10 minutes of several scheduled classes (see course outline). Quizzes will contain 5 multiple choice questions that pertain to the most recently presented lecture materials and the readings from the text. The quizzes are designed to serve as quick reviews of recently covered materials as well as to help you keep up with the reading assignments. Of the 6 quizzes, the 2 lowest scores will be dropped, with the score of the remaining four yielding 15% of the final grade. ***No make-up quizzes will be offered; if you miss a quiz, that grade will be one of the two that will be dropped.***

Exams: (60%: 15%, 20%, and 20%, for lowest to highest exam scores)

Exams primarily test conceptual understanding. The exams will be part multiple choice (~30 MCQs), part fill-in-the-blank/match the information or short answer/short essay (3-5 questions). All exams are somewhat comprehensive although none is fully cumulative; a greater focus on material covered after the previous exam is typical (refer to the study guide for each exam for a list of general concepts and detailed topics included in that test). All exams will be initially scored out of 20%. At the end of the term, your lowest midterm score will be weighted to 15% of the final grade while the other two count for 20% each.

Requests for makeup exams made prior to the exams will be granted whenever possible. However, no make-up exams will be given without evidence of a valid excuse, and prior arrangement with the instructor – if you know in advance that you cannot take all exams on the appointed dates (see the course schedule below), do not take this course! If unforeseen circumstances during the term prevent you from taking an exam, notify the instructor immediately. Allowable excused absences are medical emergencies, athletic events such as away games for student athletes and executive orders/court orders. All such occasions must be accompanied by official documentation. Student athletes should notify me of their away schedule early in the term and make arrangements for taking missed tests on the road, when possible. *Makeup exams will need to be taken before the next class period at the discretion of the instructor.* Format of make-up exams may be different in type of questions and/or choices.

TERM PAPER (15%): A prerequisite to gaining scientific knowledge of any sort is the ability to read and critically evaluate the primary scientific literature, as well as apply learned concepts to real world experiences/observations. The goal of this assignment is to help you develop these essential skills. You will write a short paper (4-6 pages) on a topic of your choice. The assignment is read an empirical research article on a topic in cognition and to apply the concepts you have learned to a real world experience/observation. The paper will be scored based on the quality of writing, critique of the reading and analysis of your observation (e.g. correctly applied scientific terminology to the observation; correct explanation of the phenomenon in terms of a theory discussed in class). More guidelines for this assignment will be posted on Canvas.

DISCUSSION ASSIGNMENTS (10%): Critically thinking about the concepts, and applying it to your everyday life, is at the core of what I want you to take away from this class. To help you practice that, I will post a discussion question on Canvas every week that asks you to think about the material for that week as applied to human cognition. We will form 5-6 member study groups in order to have some contact time outside the class in which course work may be discussed and small assignments completed as a group. The study groups will be expected to meet once a week and 5 discussion reports will be due during the term (see outline for due dates). For each report, I will give you assignments and will be looking for timely submission of study group responses (SGRs) on Canvas. Each response should be 200-300 clearly written words. **Only one discussion response is required from each group for each of the assignments.** All members of the group are expected to contribute equally to the work and will receive the same grade for the assignment.

Note: Sometimes, group members feel that not everyone in the group is working to their best and so it is not fair for everyone in the group to receive the same grade for an assignment. If such is the case for your group, you can choose (as a group) to award individual grades for the report. If the group decides that it is not fair that every person receives the same grade for a particular report, I will let the group decide on grades for each member. For example, if the group grade on a particular assignment is 85 and there are 5 members in the group, the group will have a total of 425 points (85 times 5) to spread among its members. The group can then negotiate with all members and spread out the total points to all members in any way the group sees fits, as long as all members agree to the point spread. *The only requirement is that the*

group negotiates who gets what grade and that all members of the group give the instructors a written agreement to the point spread. It will be the responsibility of the group to notify me of the point spread if they wish to use this alternative.

What about extra credit?

Attending class is important as there will often be material presented in class that is not presented equivalently in the book or available online. **This is also the ONLY way to earn extra-credit in this course!** **Extra-credit will be awarded for class participation and occasional in-class assignments/group work/discussions.**

Participation is based on **attendance and discussion**. Attendance will be taken during some (random!) class periods and after specific class activities. This can be at any point during the class period. All students who participate in the activity and sign attendance at that time will be awarded EC points. You can earn **up to 3 points** in extra credit for class participation. These points will be **added to your final grade** at the end of the term. *So, if you score an 81% on tests and assignments, and you earn 3 points of extra credit, your final score will be 84% (i.e. your final grade could go from a B-, to a B!).*

Due Dates Due dates for all assignments are contained in the course outline. **Assignments are due by the start of lecture on the appropriate date.** An assignment turned in after its deadline will be **marked down 10% for each day late**. If you do not expect to be in class on the day an assignment is due, you may turn it in to me or your TA during office hours **before** the due date.

OFFICE HOURS/CONTACTING THE INSTRUCTOR: I strongly encourage students that have questions or concerns to talk to me either before/after class or during office hours. If you are unable to meet with me during my office hours, please let me know and we will find a mutually convenient time to meet. Other than office hours, the best way to reach me is via email rather than by phone. I will be sure to respond to any emails within one working day!

Graduate teaching assistants also hold office hours and are available to assist students with conceptual understanding, reading and research assignments and to answer grading queries. Please email them if you have queries or need to set up a time to meet. Again, you may expect a response to your email within one working day.

ACADEMIC INTEGRITY: All students are assumed to have read the University Student Conduct Code <http://studentlife.uoregon.edu/conduct>

Cheating will NOT be tolerated in any form in this class. Academic misconduct is taken extremely seriously and will result in a failing grade for the course and referral to the Dean of Students for further action. Specific violations include (but are not limited to):

- Use or provision of prohibited assistance during exams
- Plagiarism- this includes both the use of the words and ideas without attribution.

All exams administered in this course are to be taken without the use of notes, books, or ancillary materials and without the assistance of any other person or group, in the class or outside of the class. Use of electronic devices such as PDAs, cell phones, or audio devices, or electronic dictionaries during the exams is prohibited. Use of these devices during exams is viewed as a violation. All students should also plan on removing or turning their hats around during exams.

All work submitted in this course must be your own. You may be required to submit writing assignments to **VeriCite**. VeriCite is a software tool designed to help students avoid plagiarism and improper citation. For more information on VeriCite refer to guidelines on Canvas. By enrolling in this course you grant the instructor permission to submit your work to VeriCite or some other plagiarism program analysis and detection program. 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. If you have any questions please ask. I will assume that all students enrolled in the course know and understand what constitutes academic misconduct and agree to be bound by these rules.

COURTESY: Included here are some general rules that seem obvious but I will emphasize them anyway. Your cell phone should NEVER ring audibly during class. Do not chat with others during class, disrupt class or distract classmates in any other way. **Please be on time** -- this is particularly important on days when we have in-class quizzes. If you arrive late, you will miss part of or the entire quiz! If you are unavoidably late or absolutely must leave early, please sit near the door and be as quiet as possible as you enter or exit.

SPECIAL ACCOMODATIONS: The UO works to create inclusive learning environments. If there are aspects of the instruction or design of this course that result in disability-related barriers to your participation, please notify me as soon as possible. If you have a documented disability, please request that a counselor at the Accessible Education Center (uoaec@uoregon.edu, tel. 541-346-1155) send a letter verifying the type of accommodation that is appropriate. For a list of resources provided by the Accessible Education Center, please see <http://aec.uoregon.edu>.

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. Please note that you may NOT use dictionaries/translators during exams/quizzes.

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 quizzes and exams unless absolutely necessary.** The official updated version of the outline will reside on the Canvas web site. **Version Updated: 9/21/2017 11:38 AM**

Date	Topic	Recommended readings	Assignments/ Due dates/ Quizzes
26-Sep	Cognitive Psychology: The science of Mind	Ch. 1	
28-Sep	Neural Basis of Cognition	Ch. 2	
3-Oct	Studying the mind and brain	Ch. 2	
5-Oct	Perception: The role of stimuli, context and experience	Ch. 3	Quiz 1, SGR 1 due [#]
10-Oct	Perception: Object Recognition	Ch. 4	Paper Topics due on Canvas
12-Oct	The role of Attention in representations	Class notes* *(Ch. 5 for ref.)	Quiz 2
17-Oct	EXAM 1 (Chapters 1-4,5*)		
19-Oct	Selective and Divided Attention	Class notes* *(Ch. 5 for ref.)	
24-Oct	Memory acquisition: <i>modal model</i>	Ch. 6	SGR 2 due [#]
26-Oct	Memory: <i>retrieval & errors</i>	Class notes* *(Ch.7 & 8 for ref.)	Quiz 3
31-Oct	Concept formation	Ch. 9	
2-Nov	Knowledge	Class notes*	Quiz 4,
7-Nov	EXAM 2 (Chapters 6,7/8*,9,11*,1-4**)		SGR 3 due [#]
9-Nov	Different types of knowledge/representations	Class notes* (Ch. 11 for ref.)	Paper drafts due for peer-editing
14-Nov	Thinking - <i>making judgments, reasoning</i>	Ch. 12	Edited drafts due
16-Nov	Decision making	Ch. 12	Quiz 5
21-Nov	Problem solving	Ch. 13	
23-Nov	No class meeting: <i>Happy Thanksgiving!</i>		SGR 4 due [#]
28-Nov	Problem Solving – <i>Expertise & creativity</i>	Ch. 13	Final term paper due Quiz 6
30-Nov	Conscious and Unconscious processing	Class notes* *(Ch. 14 for ref)	
8-Dec	Note: Final exam period: 8am!! EXAM 3 (Chapters 12,13,14*, 1-9**,11**)		SGR 5 due [#]

* Emphasis on class notes; additional readings/chapter for reference

** Included for conceptual understanding and continuity; see study guide for specific topics.

[#] Due dates for SGRs depend on pace of class discussion and may change; check Canvas for updates.