

SYLLABUS
University of Oregon

Instructor: **Dr. Jagdeep Kaur-Bala**

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Office Hours: Tuesdays 11:30am- Noon, Thursdays 11:30am-1:00pm & by appointment

Classroom: **101 LIB**

Time: **10:00pm–11:20pm TR**

Teaching support:

Stefania Ashby, 234 LISB, Off. Hrs: Tuesdays 12–2pm & by appt. stefania@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 Description: This course will examine the principles of and processes underlying learning and memory abilities. We will discuss behaviors and brain substrates of acquisition, retention, forgetting and retrieval of information with a focus on research methods used by scientists to examine learning and memory systems as well as clinical perspectives on the diagnosis and treatment of learning and memory deficits.

Learning Objectives: Each aspect of the course – readings, assignments, and tests – is designed to help you hone your study skills, develop scientific reasoning and critical thinking and while acquiring knowledge in the field of human learning and memory. You should be able to –

1. Gain foundational knowledge of major theories, research findings and methodological approaches to learning and memory. Towards this end,
 - a. readings and discussions focus on learning and memory systems with an emphasis on neural mechanisms underlying these abilities.
 - b. readings include empirical research that examines questions about the basic frameworks of different types of memory and learning mechanisms.
 - c. group discussion assignments will help you develop an understanding of and the ability to relate these findings to everyday performances e.g. encoding/retrieval failures, as well as clinical issues related to memory and learning deficits.
 - d. class discussions will include computational approaches used in studying the biological mechanisms that underlie learning and memory.
2. Gain proficiency in reading, analyzing and critically evaluating scientific literature by yourself, as well as collaboratively.
 - a. Discussion, critique and writings based on empirical research in the field are an important part of this course.
3. Develop the ability to conduct library research and generate new hypothesis and communicate scientific thought
 - a. The term paper assignment will require you to conduct a literature search, critically evaluate the readings, and generate a comprehensive research paper while comparing and contrasting empirical research.
4. Enhance your self-study and presentation skills through peer learning
 - a. you will explore many critical concepts in depth for yourself through guided reading response and study group discussion assignments.
 - b. you will share your findings and ideas with your peers through group presentations in class

Course Format: The material in this course will be presented through a combination of assigned readings, class lectures, in-class discussion, and demonstrations. 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. Please note that some class materials (videos, demos, etc.) will not be available outside of class due to copyright and intellectual property laws.

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 GTF(s).

Course Materials:

Required Text: *Learning and Memory, 3rd Edition* by Mark A. Gluck, E. Mercado and Catherine E. Myers. This is a comprehensive text for the course. *You may choose to buy the earlier edition after discussion with me or your GTF.* Please notify me immediately if you have difficulty obtaining the text from the bookstore. A copy of the text is also on reserve at the Knight Library.

Course website: This course is managed via *Canvas*. This site will provide additional readings and supplemental information for the course - syllabus, course schedule, detailed assignment guidelines, grades, copies of overheads, assignments, etc. Please be sure to check for announcements and updates often.

Workload and Expectations: When you complete this course, you will earn 4 credits toward your degree. According to University principles governing credit and contact hours, each credit equals 30 hours of work for the term. Four credits are therefore equivalent to 120 hours of work in total, or 12 hours per week for 10 weeks. You will spend about 3 hours in class each week. The other 9 hours should be spent reading, studying, and completing homework and study-group assignments outside of class.

It is expected that you will come to class regularly and participate actively. It is critical that you keep up with the assigned readings and come to class prepared to think about and discuss concepts. Discussions 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. *This is a fast paced class and you should plan on scheduling regular intervals of time for studying/assignments outside of class.* It is my hope that by the end of this course you will have a new appreciation for how we learn, retain information and use it for future reference. *(This is an important aspect of learning and memory and relevant to your life as a student! ☺!)*

GRADING POLICY

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 (Psy433 class) and the exams. Graduate students (Psy533 class) will also undertake an additional self-study assignment and prepare a presentation for class that will be graded. In addition, some opportunities for extra-credit will be available to all. **Letter grades will be determined as follows: 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.** Typically, grades are not curved, However, the instructor reserves the right to relax (but not stiffen) this criterion for final grade assignments, depending on the actual distribution of scores.

- **Pop Quizzes** – Scores of 4 (of the 6) highest scoring quizzes will be summed towards 15% of final grade
- **Midterm Exams** – 35% of final grade each (15% for your lower scoring midterm and 20% for the higher)
- **Final Exam** – 25% of final grade
- **Term Paper** – 12.5% of final grade
- **Reading reflections** – 2.5% of final grade
- **Study group discussion responses** (*433 students only*) – 8% of final grade
- **Class Participation** (*433 students only*) – 2% of final grade
- **Class presentation** (*533 students only*) – 10% of final grade
- **Extra-credit** (*optional*) - up to 3 points added to final grade

Pop Quizzes (15%): There will be 6 ‘pop quizzes’ over the course of the term. These surprise quizzes are meant will occur in the first 10 minutes of class and will contain 5 multiple choice questions that pertain to the most recently presented lecture materials and the readings. The quizzes are designed to serve as quick reviews of recently covered material, as well as to motivate you to keep up with the reading and come to class!

Of the 6 quizzes, the 2 with the lowest scores will be dropped; the score of the remaining four will count for 15% of your 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 (Midterms – 15% for lower, 20% for higher scoring midterm; Final 25%): Exams primarily test conceptual understanding. The exams will be part multiple choice, part fill-in-the-blank/match the information and part short answer/short essay. All exams are somewhat comprehensive i.e. each exam will contain questions drawn from the entire course. However, 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 midterms 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.

No make-up exams will be given without evidence of a valid excuse, and the final cannot be taken earlier or later than the time listed in the University final exam schedule – 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 rare events like 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. Format of make-up exams may be different in type of questions and/or choices.

Term Papers (12.5%): All our discussions will be based on research in the field of learning and memory. A prerequisite to gaining scientific knowledge of any sort is the ability to read and critically evaluate primary scientific literature. The goal of this assignment is to help you develop these essential skills and get familiar with how research is conducted.

A prerequisite to gaining scientific knowledge of any sort is the ability to read and critically evaluate the primary scientific literature. The goal of this assignment is to help you develop these essential skills.

Students will be required to write a 7 – 9 page (double-spaced, 1 inch margins, 10-12 point font) term paper that describes compares and contrasts two journal articles that address a topic relevant to learning and memory. I suggest that you use the textbook and course outline as a first source for selecting a general topic, followed by library, PsycINFO, and Pubmed/Google scholar searches for the selection of the two related articles on the topic of your interest (for online assistance in your search, see <http://libweb.uoregon.edu/guides/psychology/>). The chosen articles must be **empirical** in nature, with data collected to investigate a specific question related to the topic of interest (i.e., no reviews, commentaries, news reports or summary articles!). The due dates for this assignment have been designed to help you get an early start on your assignment and enable you to distribute the work on the paper throughout the term.

You must turn in four different items pertaining to the paper (Specific due dates as per course outline):

- 1) A topic name, citations of the 2 related empirical research articles chosen and a brief description of the topic (one paragraph describing why the topic is appropriate and interesting, and how the 2 research articles that you have chosen will help you investigate the topic should be **submitted to the “Term Paper” section of Canvas**. Submissions via email will not be accepted. This will account for **10% of the term paper grade**.
- 2) The term paper topic and articles chosen will be finalized after feedback from the instructor/GTF. Electronic versions of the complete articles should be submitted on Canvas. After the due date, you may not change your chosen topic and articles without the instructor/GTF’s consent.
- 3) **Peer review (optional)** - A draft of the paper that will be given to other students in the class to review. If you choose to do the peer review, you must bring a hardcopy draft of your paper to class on the date it is due. If you choose to do

this, it will account for **20% of the term paper grade (10% for your editing ability of your peer's paper and 10% for the draft)**. If you choose NOT to go through this process your final paper will be graded with this 20% included in the assessment. Edited papers are due back in the following class.

- 4) **VeriCite check**– I strongly encourage you to upload your paper to VeriCite on Canvas and check for originality of writing for yourself before submitting your paper for grading. Students who are asked to upload after submission are REQUIRED to upload their papers. In these cases, failure to do so in a timely fashion will adversely affect your grade. At that time, if your writing is found lacking in originality, you may be penalized (see academic honesty section below)!
- 5) The final version of the paper is due **in class during week 9 of term (see course schedule)**. The paper as well as the peer edited draft (for those who took the option) should be submitted in **hardcopy** at the beginning of class. **The paper should include a title page, abstract and citations written in APA style** ([reference copies of the APA Publication Manual](#) are available in many of the University Libraries).

Each paper should include (*with equal emphasis on #2 through #6 below!*):

In writing your paper you should include:

- 1) A brief introduction to the general topic.
- 2) A summary of the articles in your own words, including the question under investigation, the hypothesis being tested, the methods used, the findings, and the conclusions drawn by the authors.
- 3) A comparison of the two articles, describing how the findings of one either support, conflict, or extend the findings of the other.
- 4) A discussion of the merits and deficits of the articles, including suggested ways that the deficits could have been avoided. *For example, questions such as these should be addressed: Is the question an interesting one, and is it framed properly? Is the hypothesis valid and defensible? Are the methods appropriate to address the question? Are the findings clear and interpreted appropriately? Are the authors' conclusions warranted, given the findings?*
- 5) An overall assessment of the significance and quality of the contribution of the articles to the field of learning and memory.
- 6) Future directions for the research should be discussed. Suggest a research study you would conduct if you were to take this research further. (*This should include a clear well defined hypothesis and discussion of expected findings, but need not detail methods or analysis*)

In order to improve the quality of papers, and to provide you with experience editing, papers will be **peer edited** (optional). On the day that your paper is "due for editing", you will turn your paper in hardcopy at the beginning of class. At the end of class, you will be given someone else's paper to edit. You will have 2-5 days to edit the other student's paper, and then you will bring the paper to the next class and return it to the student. Your paper, meanwhile, will have been edited by someone else. You will then have a few more days to consider the corrections, incorporate those you think are good, revise the paper, and then turn in your "final version" of the paper **AND** the corrected original. Your grade on the paper will be based mainly on the final version, but your original will be considered too (10% points), in order to prevent sloppy first drafts. Your editing will also be evaluated (10% points), and you will receive points toward your final grade for it. Guidelines for editing will be available on Canvas.

Important note: ALWAYS keep a copy of your paper and reference articles either on disk, or a hard copy! Your peer editors are no more reliable than you, perhaps less so, and they may misplace or forget your paper. If your peer editor does not return your edited paper to you, you will not be penalized (except that your paper will not have the benefit of having been edited – you may wish to ask a friend in the class to edit your paper for you), but you will still be responsible for turning in an original and final version of the paper when it is due. Also, please keep in mind that just as the quality of students in this course varies so does the quality of editing. Taking bad advice from a peer editor is no excuse for errors in a paper. Papers (drafts) are due at the beginning of class on the day they are due. If you don't turn your paper in before the start of class, it will not be eligible for peer editing, and you will not be given a paper to edit (so you will lose your peer editing points). If you cannot be in class the day a paper is due for peer editing, you may turn in the paper early so that you will be eligible for the peer editing system, but it is your responsibility to arrange to pick up the paper you are to edit from me. If you cannot be in class the day peer edited papers are to be returned to their authors, you can also return the edited paper early.

Peer-edited draft (if option taken) should be attached to your final paper; both submitted in hardcopy before class on the due date. The term paper grade will be determined by 1) the timely submission of your topic and citation and the paragraph describing the term paper topic (10%), 2) the quality of the final paper (90%) [or paper(70%) and draft(10%) with the peer editing that you provide another student (10%)]; in total, the paper grade is worth 12.5% of the final grade in the course. *Please note: At no point will email submissions be accepted for this assignment. Please be sure to submit the topic, citations, and articles on Canvas and the draft and final paper for grading as hardcopies! Finally, plagiarism will not be tolerated, and will be dealt with according to official University policy (see section on Academic Honesty below).*

Study group Reading responses and discussion assignments (8% - PSY433 students only): 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 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. For each report, I will give you assignments and will be looking for timely responses (via Canvas). Discussion assignments will be posted and announced via Canvas. The timing of these assignments will depend somewhat on the pace of class discussion (see tentative dates on course outline).

Only one response is required from each group for each of the assignments. All members of the group 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.*

Participation (2% - PSY433 students only) is based on attendance and discussion. It is important that you come to class! Many of the exam questions are derived from lecture content that is not in the assigned readings. Other class materials, like videos are not available online and discussions/activities often can't be made up after the class. *Credit will be awarded for class participation and occasional in-class assignments/group work/discussions.* 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 participation points. Additionally, a moderated discussion on Canvas discussion boards that helps learning and concept clarification may be assigned for credit.

Class Presentations: (10% - 533 (graduate) students only) Psy533 students will be required to create a 15 min presentation related to the course materials on a topic of their interest. Presentations should be designed to share in depth study on an area related to behavioral neuroendocrinology not directly covered in the lectures. Topics for presentations are due **beginning of the first class of week 3**. Students are expected to set up an appointment for a one-on-one meeting with the instructor *at least* once before this date and once before the date of their presentation. These meetings give us a chance to explore your interests together. I am available to help you manage your reading list, discuss findings and plan your presentation. This ensures that the effort you put into your assignment is focused and fruitful!

If two or more students have the same idea for a presentation, the one that informs me first (by email) will have exclusive rights to the idea. You are encouraged to confer with me about the choice of topics, the research involved and the preparation of the presentation. Accompanying write-up and copies of slides, overheads, etc. are **due on the day of your presentation**. *The instructor reserves the right to keep copies of the presentations for use in future courses.* Of necessity, the class presentations will be spread out through the latter part of the term; some presentations will have to take place earlier in the term than others. Dates of individual presentations will be decided by the instructor. As such, while assessing/grading the presentations, I will be sure to keep in mind the amount of time (into the term) each student got for preparation of this assignment.

Due Dates: **All assignments are due by the start of lecture on the appropriate date**, and can be turned in to me (or your GTF) during class or during office hours *the day before it is due*. An assignment turned in after its deadline will be marked down 10% for each day late.

What about extra credit?

The only way to earn extra credit in this class is to accrue participation points in excess of the 2% listed above. You can earn **up to 3 additional 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 80% with tests and assignments, and you earn 3 points of extra credit, your final score will be 83%.

Academic Honesty: ***Cheating will NOT be tolerated in any form in this class.*** I assume that all students are familiar with the regulations stipulated in the UO Student Conduct Code (<http://conduct.uoregon.edu>). Violations of the Student Conduct Code are taken extremely seriously. Specific violations include (but are not limited to) :

- Using or providing prohibited assistance during exams. All exams in this course are **closed-book**. You are not permitted to use any materials during the exams. Books, notes, computers, cell phones, headphones, etc., should be closed and put away.
- Plagiarism. This includes improper use of words and ideas. All work submitted in this course must be your own and must be original for this course. 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 analysis and detection program.

For 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 (*Please note: Reporting of suspected Academic Misconduct is MANDATORY -- required by the university. It is NOT at the discretion of the instructor!*) 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://uodos.uoregon.edu/StudentConductandCommunityStandards/AcademicMisconduct/tabid/248/Default.aspx>)

Courtesy

Out of courtesy for other students and out of respect for the class, I request the following:

- (1) Please turn off your cell phone during class. This also includes disabling phone alerts (beeps, buzzes, etc.).
- (2) Note taking by computer is ok. However, please make an effort to minimize distraction/disruption/noise, which includes refraining from computer use during class that is unrelated to note taking.
- (3) Please do not chat with others during class. If you have a thought you'd like to share with your classmates, please address it to the whole class.
- (4) Please be on time. I will start class at the listed time. In particular, on quiz and exam days, it is important that you reach class before the start time. Late arrival may cause you to miss part or all of the pop quiz for the day. Late arrivals also disturb others engaged in taking the test. Similarly, please refrain from leaving class until you have turned in your test; it disturbs others as well as presents academic honesty concerns.
- (5) *If you perceive or experience an emergency during class, or test, please bring it to the instructor's or proctor's notice immediately.*

Accessibility, Diversity and Inclusivity

It is the policy of the University of Oregon to support and value diversity. It's also personally important to me that my classes are accessible to all and respectful of diversity, including diversity in race, ethnicity, gender, sexuality, disability, socioeconomic status, religion, culture and ideology. It is imperative to me that all students feel welcome in my classes. My goal is to create a respectful classroom environment where students feel safe to explore difficult topics. Many topics that we will be discussing in class are issues that may evoke strong emotions and/or have personal significance to you or your classmate's life. As such, I ask that all class discussion be open, understanding and respectful. Your suggestions, concerns, and other feedback are always welcome, and I will listen to you with respect and an open mind.

If you need support or counseling, please be sure to seek out a supportive friend, counselor, and/or a social service (see list below).

Counseling resources:

<i>Local Crisis Lines & Counseling</i>	
University of Oregon Crisis Line	346-4488
University of Oregon Counseling Center	346-3227
Center for Community Counseling	344-0620

Students with Documented 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, but certainly within the first two weeks of term. *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 in 164 Oregon Hall at 346-1155 or uoaec@uoregon.edu . Also, please request that an AEC adviser send a letter verifying your disability and accommodation needs. For a list of resources provided by the Accessible Education Center, please see <http://aec.uoregon.edu/about/index.html>*

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 to language difficulties, please see the instructor as soon as possible to make special arrangements. Please note that you may NOT use electronic dictionaries/translators during exams/quizzes. However, if necessary, please discuss the need for a paper dictionary/translator at the beginning of the term with the instructor and appropriate arrangements will be made.

Students with financial hardship: If you are a student experiencing financial hardship and do not have access to notebooks, pencils, and other imperative resources to succeed in this course, please talk to me within the first 2 weeks of the term for assistance. We can work together to ensure you find the resources & time you need.

COURSE OUTLINE: *This is only a working draft of the course outline; it will be revised as the term progresses. The official updated version of the outline will reside on Canvas. Dates on which particular topics are to be presented in lecture depend on the pace of class discussion and are subject to change, as are reading assignment due dates. However, I will not change the dates of exams or term paper deadlines unless absolutely necessary. Version Updated: 29 March 2017*

Date	Topic	Readings (3 rd edition)	Assignments/Due dates
4-Apr	Psychology of Learning and Memory <i>Theories and Models</i>	Ch. 1	
6-Apr	Neuroscience of Learning and memory <i>Neuroscience and physiology</i>	Ch. 2	
11-Apr	Non-Associative learning <i>Important and unimportant events</i>	Class notes** (Ch.3 for ref.)	
13-Apr	Associative learning <i>Predicting events and consequences</i>	Class notes** (Ch.4,5 for ref.)	SGR 1 due
18-Apr	Generalization & Discrimination <i>Remembering similarity or noticing novelty</i>	Ch. 6	Paper Topic due
20-Apr	Guest lecture	Class notes**	Presentation topics due (PSY533 only)
25-Apr	Midterm Exam		
27-Apr	Learning to remember <i>Modal model</i>	Class notes** (Ch. 9 for ref.)	
2-May	Working Memory <i>Transient memories & attention</i>	Ch. 9	
4-May	Executive control <i>Representations and Retrieval</i>	Ch. 9	
9-May	Episodic & Semantic Memory: <i>Remembering Events & Facts</i>	Ch. 7	SGR 2 due
11-May	Remembering to remember <i>Encoding</i>	Ch. 7	
16-May	Accessing stored memories <i>Retrieval, memory errors & meta-memory</i>	Ch. 7	
18-May	Midterm Exam		SGR 3 due
23-May	Guest lecture	Class notes**	Paper draft due for peer editing (optional)
25-May	Knowledge and Context <i>Biases</i>	Class notes**	Edited draft due
30-May	Emotional Influences on Learning & Memory <i>Autobiographical and intense memories</i>	Ch. 10	SGR 4 due
1-Jun	Social Learning and Memory <i>Observational learning</i>	Ch. 11	Final Paper due
6-May	Issues in learning and memory <i>Memory across the lifespan</i>	Class notes**	
8-June	Issues in learning & memory <i>What don't we know?</i>	(Ch. 12 for ref.)	SGR 5 due
12-June	FINAL EXAM : Monday, 8:00am – 10:00am		

**Additional reading on Canvas, emphasis on class discussion; chapter for reference

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