PSYC333 – Memory 1

Term 1 (September-December, 2019), Tuesday & Thursday, 2:00-3:30pm West Mall Swing Space, Room 221 Credit Value: 3

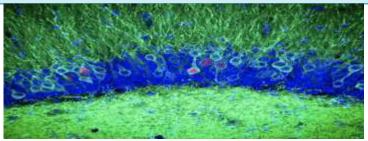


Image of the (dorsal) hippocampus, an area critical for memory. The pink cells represent cells that were active during a threatening experience in rodents. Image is courtesy of Dr. Stephanie Grella.

Pre-Reqs: Either (a) PSYC 100 or (b) two of PSYC 101, PSYC 102. PSYC 205, PSYC 207, PSYC 208, PSYC 216, PSYC 217. Non-PSYC students may substitute LING 420 or LING 200 and 201 for the above prerequisite.

Team

Instructor

Daniela Palombo, PhD

Office

Kenny 3108

Office Hours

Friday 10:30-11:30am

Email

daniela.palombo@psych.ubc.ca

Teaching Assistant

Jessica Flores, MA

Office

Kenny 2563

Office Hours

Jessica: Tuesday 11-12pm + additional for midterms/assignments/exam (announced on Canvas)

Email

iflores@mail.ubc.ca

About

In this course, you will take a closer look at the psychological science of memory. We will consider the basic science of memory at cognitive, behavioural and neuroscientific levels of analyses. We will examine historical and contemporary research in human and non-human animal populations. Moreover, we will discuss memory in the context of neuropsychological and clinical populations.

Format & Activities

This course is lecture based and the lecture slides are provided prior to every lecture. Lectures will be based on textbook content and beyond. The latter includes additional relevant content (e.g., hot topics in the field), other reading material (e.g., journal articles), or occasional video clips. Hence students should attend lectures to access all of the course content. There is no mandatory requirement to participate in online (e.g., canvas) or in-class discussions, but these activities are encouraged to maximize learning.

Learning Outcomes

- 1. Learn the fundamentals of human memory, including its historical context, major theoretical models, landmark experiments, and the latest research in the field
- 2. Examine animal models of memory
- 3. Understand how the brain supports various types of mnemonic processes
- 4. Explore clinical aspects of memory, including a consideration of the consequences of brain injuries and/or diseases on memory functioning
- 5. Learn how to recognize and communicate good psychological science research practices in memory
- 6. Appreciate how the psychological science of memory can be applied to everyday life

Learning Materials

Required Textbook

Learning and Memory: From Brain to Behavior 3rd Edition (Gluck, Mercado & Meyers), available at UBC Bookstore for \$149.30

An e-version is also available at:

https://store.macmillanlearning.com/ca/product/Learning-and-Memory/p/1464105936?searchText=gluck

Required Readings

See course schedule

Communication

Website

Lecture slides, assignments, and grades are available on UBC Canvas.

Email

The best way to get in touch with Daniela or Jessica is through our UBC e-mails (include "PSY333" in the subject line as Daniela teaches more than one class, and your TA wants to find your emails quickly!). Include your full name and student number in your email, because there are times when two students in the same class can have the same name. **Please check for the information in the syllabus first.**

Office

See page 1. To schedule an appointment with Daniela, send her an email. Daniela has a very 'opendoor' policy. If she is in her office and it is open, do not hesitate to drop in with a question.

Assessment

Midterm 1 (20%) Midterm 2 (20%) and Final Exam (30%)

The midterms/final exam is based on material from the textbook, lectures, supplementary readings, and videos. The format is multiple-choice, shorter and longer questions and diagrams.

The final exam is cumulative and will cover material assessed on Midterm 1, Midterm 2 and material covered in class after Midterm 2.

Short Paper (30%)

The short paper involves an essay critiquing an article assigned to you (see assignment outline when available).

Extra Credit (3%)

One way to learn more about psychology is to be a participant in ongoing research projects. You may earn up to 3 credits toward your course grade by participating in studies that are posted on https://ubc-psych.sona- systems.com. Please register in this online system by end of the first month of class. You can also earn your first half hour of credit by completing a pretesting survey that will make you eligible for a wider variety of studies. Please note that in a given term, you can earn no more than one hour of credit for online studies (not including the pretesting survey). As an alternative to participating in

studies, you may choose to complete library writing projects, in which you read and summarize a research article; each article summary counts as one hour of research participation. More information about this option can be found at: http://www.psych.ubc.ca/resguide.psy. All of your credits for study participation or the library option will be added to your final course grade, after any scaling that may have been applied.

Access and Diversity

UBC is committed to equal opportunity for all of its students including those with documented physical or learning disabilities. If you have a disability that affects your learning or performance in class, including exam writing, please visit: http://students.ubc.ca/about/access.

Policies

Attendance and Class Etiquette

Although we do not take attendance in this class. you are strongly encouraged to attend every lecture to achieve the highest grade possible. Class participation is strongly encouraged but not mandatory. While you are in class, you are permitted to use your laptop or iPad for course-related activities (e.g., taking notes). We discourage you from using your laptop (or other devices) for non-course activities as this may be a distraction to your classmates. If you decide to do so, however, please try to sit at the back of the room.

Midterm and Final Exams

Bring an HB pencil and an eraser to each exam to complete the multiple-choice questions answer-sheet that is machine scored (the machine <u>does not</u> read answers marked in pen). The remainder of the exam should be completed in pen. Note that during exams, invigilators may ask students to move or alter students' seating arrangements with no explanation provided. This may be due to the suspected or observed misconduct of a classmate in an adjacent seat. Students who arrive to an exam after a classmate has completed the exam and left the exam room will not be permitted to write the exam.

Grading

In order to avoid grade inflation and maintain equity across course sections, all psychology courses must comply with departmental grade norms: The average grade in a 300- and 400-level Psychology course is 70% for an exceptionally strong class, 68% for an average class, and 66% for a weak class. Scaling (either up or down) may be required to comply with these norms.

Disputing a Grade

Any complaint about the midterm or paper should be made in writing to the relevant TA and myself and should detail the point of contention. All complaints should be made within **1 week** of receiving your grade.

Missing a Midterm

<u>There are no make-up midterms</u>. For course policies regarding in-term academic concessions, please refer to the relevant UBC calendar

entry: http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,329,0,0.

If granted concession, your other midterm will be reweighted. If you miss a midterm without a legitimate excuse and are not granted concession, you will receive a mark of zero.

Late Assignment

In the absence of concession, there is a 10% penalty per day for lateness and the paper will not be accepted if it is more than one week late. (e.g., if it is due on a Tuesday, the last day it will be accepted is the following Tuesday).

Psychology Department's Position on Academic Misconduct

Cheating, plagiarism, and other forms of academic misconduct are very serious concerns of the University, and the Department of Psychology has taken steps to alleviate them. In the first place, the Department has implemented software that can reliably detect cheating on multiple-choice exams by analyzing the patterns of students' responses. In addition, the Department subscribes to TurnItIn – a service designed to detect and deter plagiarism. All materials (term papers, etc.) that students submit for grading will be scanned and compared to over 4.5 billion pages of content located on the Internet or in TurnItIn's own proprietary databases. The results of these comparisons are compiled into customized "Originality Reports" containing several sensitive measures of plagiarism; instructors receive copies of these reports for every student in their class.

In all cases of suspected academic misconduct, the parties involved will be pursued to the fullest extent dictated by the guidelines of the University. Strong evidence of cheating or plagiarism may result in a zero credit for the work in question. According to the University Act (section 61), the President of UBC has the right to impose harsher penalties including (but not limited to) a failing grade for the course, suspension from the University, cancellation of scholarships, or a notation added to a student's transcript.

All graded work in this course, unless otherwise specified, is to be original work done independently by individuals. If you have any questions as to whether or not what you are doing is even a borderline case of academic misconduct, please consult your instructor. For details on pertinent University policies and procedures, please see Chapter 5 in the UBC Calendar (http://students.ubc.ca/calendar) and read the University's Policy 69 (available at http://www.universitycounsel.ubc.ca/policies/policy69.html).

University Policies

UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions.

Details of the policies and how to access support are available on the UBC Senate website.

Copyright

All materials of this course (course handouts, lecture slides, assessments, course readings, etc.) are the intellectual property of Dr. Palombo or licensed to be used in this course by the copyright owner. Redistribution of these materials by any means without permission of the copyright holder(s) constitutes a breach of copyright and may lead to academic discipline. For example, you are not permitted to redistribute any recordings made of the lecture without permission (including posting online).

Resources

- **UBC Wellness Centre** (604-822-8450): students.ubc.ca/livewell/services/wellness-centre Speak with other students about how to manage stress, healthy sleep and eating, safe sex, etc.
- **BC Crisis Center** (604-872-3311): crisiscentre.bc.ca Non-profit, volunteer-driven organization that provides 24/7 emotional support for those in crisis in BC.
- **Counselling Services** (604-822-3811): students.ubc.ca/livewell/services/counselling-services Offers resources to help you maintain mental health while in school.
- **Study Support:** Learning Commons (http://learningcommons.ubc.ca/) is an online resource designed to provide UBC students with learning and study support.
- Writing Support: UBC students may obtain assistance with writing through the UBC Centre for Writing and Scholarly Communication (https://learningcommons.ubc.ca/improve-your-writing/).

(continued on the next page)

Schedule

Week	Date	Topic	Reading(s)
1	Sep 3	Imagine Day (no class)	Chapter 1
	Sep 5	Syllabus Review, History of Memory 1	
2	Sep 10	History of Memory 2 + Neuroscience of Memory 1	Chapter 2
	Sep 12	Neuroscience of Memory 2	Article: Vaidya et al. 2019
3	Sep 17	Habituation, Sensation, etc. 1	Chapter 3
	Sep 19	Habituation, Sensation, etc. 2	
4	Sep 24	Class Assignment (led by Jessica Flores, MA)	Article: Bechara et al. 1995
	Sep 26	Classical Conditioning 1 (Dr. Veronica Dudarev)	Chapter 4
5	Oct 1	Classical Conditioning 2	Chapter 4 cont.
	Oct 3	Operant Conditioning 1	Chapter 5
6	Oct 8	Test 1	
	Oct 10	Term Paper Review; Generalization etc. 1	Chapter 6
7	Oct 15	Generalization etc. 2	Chapter 6 cont.
	Oct 17	Episodic & Semantic Memory 1	Chapter 7
8	Oct 22	Episodic & Semantic Memory 2	Chapter 7 cont.
	Oct 24	Episodic & Semantic Memory 3	
9	Oct 29	Episodic Future Thinking (Term Paper Due)	
	Oct 31	Emotional Memory 1	Chapter 10
10	Nov 5	Emotional Memory 2	Chapter 10 cont.
	Nov 7	Emotional Memory 3	
11	Nov 12	Test 2	
	Nov 14	Skill Memory 1	Chapter 8
12	Nov 19	Sensory & Working Memory 1	Chapter 9
	Nov 21	Sensory & Working Memory 2	
13	Nov 26	Development and Aging	Chapter 12
	Nov 28	Recap	

You are not responsible for Chapter 11; While you are required to read every other chapter, there are certain pages of some chapters that you will not be responsible for in terms of testing (i.e., this material will not be on the tests or exam). Information about this will be posted on Canvas before the tests or exam.

Optional reading:

The forgotten part of memory https://www.nature.com/articles/d41586-019-02211-5