

Memory

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.

TEAM

Office Hours: See Canvas

Instructor:

Daniela Palombo
(She/Her/Hers), PhD
daniela.palombo@ubc.ca

Hello! I am an Assistant Professor in the Psychology Department at UBC and I run a [cognitive neuroscience](#) laboratory, where we investigate memory and imagination. I look forward to getting to know all of you this term.

TA Team: see Canvas.

ABOUT

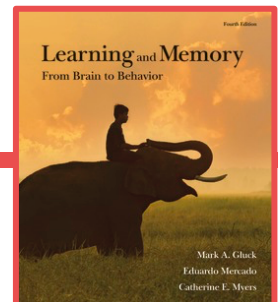
In this course, you will take a closer look at the psychological science of **memory**. Think about your fondest and most cherished memories—the ones you will never forget. How were these memories formed and why do they leave such a lasting impression? We will consider the science of memory at many levels: *cognitive, behavioural and neuroscientific*. We will examine historical and contemporary research in human and non-human animals. We will discuss memory in the context of neuropsychological and clinical populations.

FORMAT

This course includes mainly live lecture, videos, podcasts, including occasional home viewing content. PDF of lecture slides are provided on Canvas *before* class. Lectures will be based on textbook content and beyond. The latter includes additional relevant content (e.g., hot topics in the field), discussion of other reading material (e.g., journal articles), etc.

LEARNING MATERIALS

Learning and Memory: From Brain to Behavior
4th Edition (Gluck et al.)
E-version required; hard copy optional



(Although this text is available in other editions, I cannot guarantee that those editions cover the content of this course.)

AFTER TAKING THIS CLASS YOU WILL BE ABLE TO ANSWER:

How and why
do we
remember?

What happens
in our brain
when we
remember?

How is
memory
affected in
disease and
brain injury?

How does
memory relate
to mental
health?

How can I
apply the
science of
memory to
everyday life?

How can I
recognize and
communicate
scientific
research?

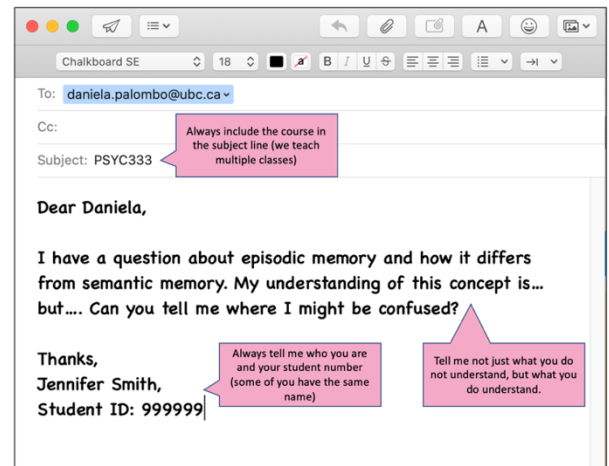
COMMUNICATION

Website

All course materials are available on Canvas. Please feel free to use the **discussion forum** to post questions and engage in course content.

Email

The best way to get in touch with us is through our UBC e-mails, with an expected response within ~48 h. (Please check for the information in the syllabus first.) I understand that some students do not feel comfortable emailing professors. They do not know what to say, or how to say it. Try something like this (right panel). Remember, we want to hear from you and we are here to help! **Email Daniela for content questions and your TAs for assessment questions (quizzes, assignments, etc.).** Include the course code **and section**.



Course Announcements

We will send out announcements through Canvas, which will arrive to you through email. **Please check your spam mail to make sure you have not missed any messages.** Please check Canvas often for other notices.

ASSESSMENT

Quizzes 1-3 (20% per quiz x 3 quizzes = 60% total)

The quizzes are based on material from the textbook, lectures, supplementary readings, podcasts, and videos. The format of each quiz will be discussed in advance of each quiz (in the form of a study outline). Quizzes take place during class time but will be completed remotely from Canvas. In other words, you can complete the Canvas Quiz from anywhere you like. Students should use the terminology (and spelling) used in this course for short answer questions. **If you have an accommodation that gives you extra time to write the quiz, please email your accommodation letter—with the file name as your first and last name—to me several days in advance. You only need to email me your letter one time. Quizzes will not be returned to you but can be discussed in office hours with your TAs.**

Final Exam (40%)

The final exam is cumulative. The format and medium of the final exam will be discussed later in the course.

THERE IS NO PARTICIPATION GRADE FOR THIS COURSE AND I DO NOT PLAN TO TAKE ATTENDANCE. HOWEVER, THIS IS AN IN-PERSON CLASS, WITH ACTIVITIES AND DISCUSSION THAT WILL FACILITATE COURSE LEARNING.

Extra Credit via the Human Subject Pool (HSP) (3%)

As part of this course, you are invited to earn **3% extra credit**

Most students will choose to earn these credits by spending **three hours participating in psychology studies (worth 1% point for each hour)** through the Department of Psychology's Human Subject Pool (HSP) system. You can locate, create an account, and sign up for studies by going to <https://hsp.psych.ubc.ca>. **Please register in the system by the end of the first month of classes to have the opportunity to earn your first ½ hour credit with a brief online survey that will increase your eligibility for more studies.**

Once registered in the system, you will be able to browse through and select which studies you wish to participate in, sign up for an available timeslot, and confirm your accumulated credits afterward. **At the end of the last day of class for the term, the subject pool is closed.** At that point, you will no longer be able to receive credits. I strongly urge you to participate in and confirm your credits long *before* the last week of class since **many studies will not offer timeslots near the end of the term and you may be locked out before allocating your credits to your desired course.** Further instruction on how to use the HSP online system can be found at <https://psych.ubc.ca/undergraduate/opportunities/human-subject-pool/> in the document entitled "Subject Pool Information for Participants."

Alternative assignment:
The Library Option

As an alternative to participation in psychology subject pool experiments, you may complete a library-writing project. Such projects consist of reading and summarizing 1) the research question, 2) the methods and 3) the results (in written form) of a research article from the peer reviewed journal *Psychological Science*. You will receive one (1) research participation credit for each article summary that meets the following requirements.

Requirements:

- The article must have been published in the journal titled "*Psychological Science*"
- The article must have a publication date from the year 2000 to present (i.e. papers from 2001 are acceptable; those from 1999 or earlier are not)
- The article must be a research article; it cannot be a review article, a news item, a notice, or a letter to the editor, for example
- The summary should be approximately 500 words in length
- You must include your name, student number, course, section, instructor and email address on each summary
- You must log on to the Human Subject Pool (HSP) system (<http://hsp.psych.ubc.ca/>) and create an account before submitting your article summaries. Your credit is assigned using the online system.

For each course, you may obtain the same number of extra credits via the library option as specified in the course syllabus (i.e., the same number of credits available for students who participate in research).

Summaries must be submitted **no later than 10 days before the end of classes.**

You are to submit your article and your summary to turnitin.com. If you don't have a turnitin account already (from a previous course), you will need to create a user account in Turnitin. **For the library assignment the class ID is 37199858, class name is "HSP W2 2022-2023" and password is "Research".** See www.turnitin.com, and click on the "Training" link at the top of the page for detailed instructions on how to submit papers to Turnitin. Any student who is suspected of plagiarism will, at a minimum, not be granted credit, and their course instructor will be notified. Further action may be taken at a departmental or university level.

HSP Online Study Credit Limit:

The online study credit limit for this term is 2 credits. Therefore, only 2 credits can be earned via online studies. All other credits will require the completion of in-lab (in person) studies or library assignments.

DIVERSITY AND ACCESS

Our classroom is one that is equitable, diverse, inclusive, and supportive. We respect and elevate each other. We are a team. Please remain respectful of your classmates, instructor, TA, and guest lecturers at all times.

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>. UBC provides appropriate accommodation for students for religious and cultural observances.

POLICIES

Grading

In order to reduce grade inflation and maintain equity across multiple course sections, all psychology courses are required to comply with departmental norms regarding grade distributions. The average grade in 100- and 200-level Psychology classes will be 72 for an exceptionally strong class, 70 for an average class, and 68 for a weak class, with a standard deviation of 14. The corresponding figures for 300- and 400-level classes will be 75, 73, and 71, with a standard deviation of 13. Scaling may be used in order to comply with these norms; grades may be scaled up or down as necessary by the professor or department. Grades are not official until they appear on a student's academic record. You will receive both a percent and a letter grade for this course. At UBC, they convert according to the key below:

A+	90-100%	B+	76-79%	C+	64-67%	D	50-54%
A	85-89%	B	72-75%	C	60-63%	F	0-49%
A-	80-84%	B-	68-71%	C-	55-59%		

Disputing a Grade

Any complaint about a graded item should be made in writing to your TA and should detail the point of contention. All complaints should be made within **1 week** of receiving your grade. After 1 week, we will not accept complaints. If you received your mark on a Tuesday, you will have until the end of the day on the subsequent Tuesday to file a complaint.

Missing a Quiz or Final Exam

There are no make-ups. If you need to miss a quiz and concession is granted (see concession links below), I will re-weight your exam. If you must miss the final exam, you will need to apply for deferred standing via your Faculty academic advising office. Please do not make April travel or work plans until the final exam schedule is released in February.

Obtaining Concession

If you miss marked coursework and are an Arts student, review the Faculty of Arts' [academic concession page](#) and then complete Arts Academic Advising's [online academic concession form](#), so that an advisor can evaluate your concession case.

If you are a student in a different Faculty, please consult [your Faculty's webpage on academic concession](#), and then contact me where appropriate.

Academic Integrity

The academic enterprise is founded on honesty, civility, and integrity. As members of this enterprise, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work. Violations of academic integrity (i.e., misconduct) lead to the breakdown of the academic enterprise, and therefore serious consequences arise and harsh sanctions are imposed. For example, incidences of plagiarism or cheating may result in a mark of zero on the assignment or exam and more serious consequences may apply when the matter is referred to the Office of the Dean. Careful records are kept in order to monitor and prevent recurrences. A more detailed description of academic integrity, including the University's policies and procedures, may be found in the [UBC Calendar: Student Conduct and Discipline](#).

Academic Accommodation for Students with Disabilities:

Academic accommodations help students with a disability or ongoing medical condition overcome challenges that may affect their academic success. Students requiring academic accommodations must register with the [Centre for Accessibility](#). The Centre will determine that student's eligibility for accommodations in accordance with Policy LR7: Academic Accommodation for Students with Disabilities. Academic accommodations are not determined by your instructors, and instructors should not ask you about the nature of your disability or ongoing medical condition, or request copies of your disability documentation. However, your instructor may consult with the Centre for Accessibility should the accommodations affect the essential learning outcomes of a course.

Additional 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.

COPYRIGHT

All materials of this course (syllabus, course handouts, lecture slides, quizzes, course readings, etc.) are the intellectual property of either Dr. Palombo or UBC, or licensed to be used in this course by Dr. Palombo in the Winter 2 term of 2023 at UBC. **Redistribution of these materials by any means without permission of the copyright holder(s) constitutes a breach of copyright.** For example, you are not permitted to redistribute any recordings of lectures, slides, or assignments without permission (including posting online to sites off the University of British Columbia servers).

RESOURCES

The Equity and Inclusion Office has put together a list of resources to help you when you need it, available at <https://equity.ubc.ca/resources/students/>. Here are some:

<p>The Centre for Accessibility Provides support for students with a disability or ongoing medical condition (academic accommodations, exam accommodations, financial support and assistance). Tel: 604.822.5844 Email: accessibility@ubc.ca</p>	<p>The Wellness Centre Includes a staff of trained student volunteers available to help you with mental and physical health Tel: 604.822.8450 Email: wellness.centre@ubc.ca</p>
<p>Counselling Services Offers a variety of services to help you manage mental health concerns Tel: 604.822.3811</p>	<p>Here2Talk A mental health service which provides free, confidential counselling as well as community referral services 24/7 via app, phone and web. Tel: 1-877-857-3397 (Canada-wide toll free) Tel: 604-642-5212 (direct)</p>

LAND ACKNOWLEDGEMENT

The land in which our classroom is located, and where we gather twice a week, is the traditional, ancestral, and unceded territory of the xʷməθkʷəy̓əm (Musqueam) people. If you would like to learn and engage more with the meaning of these terms (traditional, ancestral, and unceded), please visit this [link](#). We express our deep gratitude to the original caretakers to this land and the water that surrounds it.

SCHEDULE

Module	Date	Medium	Topic	Lecturer	Chapter
1	10-Jan	Live	Introduction; ice breaker	Palombo	None
1	12-Jan	Live	Best Practices for Remembering in the Classroom, History of Memory Part 1 + Class Activity	Palombo	https://ctl.t.ubc.ca/files/2011/02/eich_cogscienc_e.pdf Ch 1 https://www.ted.com/talks/gina_poe_your_brain_s_work_during_sleep
1	17-Jan	Live	History of Memory Part 2	Palombo	Ch 1
1	19-Jan	Pre-recorded (Home viewing)	Neuroscience Basics	Palombo	Ch 2
1	24-Jan	Live	Neuroscience of Memory Class Activity	Palombo	Ch 2
1	26-Jan	Canvas	Canvas Quiz	-	-
2	31-Jan	Live	Special Topic: The Replication Crisis	Brandon Forys	-
2	02-Feb	Live	Habituation and Sensitization	Palombo	Chapter 3
2	07-Feb	Live	Classical Conditioning	Palombo	Parts of Chapter 4
2	09-Feb	Live	Instrumental Conditioning	Palombo	Parts of Chapter 5
2	14-Feb	Pre-recorded (Home viewing)	Generalization	Palombo	Parts of Chapter 6

2	16-Feb	Canvas	Canvas Quiz	-	-
3	21-Feb	-	Reading Week	-	-
3	23-Feb		Reading Week	-	-
3	28-Feb	Live	Episodic / Semantic Memory Part 1	Nada Alafain	Ch 7
3	02-Mar	Pre-recorded (Home viewing)	Episodic / Semantic Memory Part 2	Palombo	Ch 7
3	07-Mar	Live	Special Topic: A tale of two bodies of water Group Activity	Palombo	https://psycnet.apa.org/record/1978-22375-001 and https://royalsocietypublishing.org/doi/10.1098/rsos.200724
3	09-Mar	Live	Future Thinking	Palombo	https://www.jneurosci.org/content/jneuro/31/28/10262.full.pdf
3	14-Mar	Live	Emotional Memory Part 1	Victoria Wardell	Ch 10
3	16-Mar	Live	Emotional Memory Part 2	Palombo	Ch 10
3	21-Mar	Live	Emotional Memory Part 3	Palombo	Ch 10
3	23-Mar	Canvas	Canvas Quiz	-	-
4	28-Mar	Home viewing	Podcast	-	Podcast will be posted.
4	30-Mar	Live	Short Lecture: Getting Involved in Research	Palombo	-
4	04-Apr	Live	Working Memory Part 1	Palombo	Ch 9
4	06-Apr	Live	Working Memory Part 2	Palombo	Ch 9
4	11-Apr	Pre-recorded (Home viewing)	Development and Aging	Palombo	Ch 12
4	13-Apr	Live	Review	Palombo	-

The final exam will be in person (date TBD).

Page 1 Image: Image of the hippocampus, an area critical for memory. The pink represents brain cells that were active during a threatening experience in rodents. Image courtesy of Dr. Stephanie Grella.

Where can you find slides and video recordings? Please see the “Modules” section on Canvas.

*** the course schedule is subject to modifications, if necessary, throughout the term ***

COVID-19 SAFETY

You are not required but welcome to wear a non-medical mask during live lectures, including entering and exiting the building. **I ask that you kindly refrain from eating during class out of respect for your classmates and myself to avoid unnecessary spread of COVID-19 or seasonal viruses.**

If you're sick, it's important that you stay home – no matter what you think you may be sick with (e.g., cold, flu, other). If you think you might have COVID symptoms and/or have tested positive for COVID and/or are required to quarantine: You can do a self-assessment for COVID symptoms here: <https://bc.thrive.health/covid19/en>

Do not come to class if you are sick, have COVID symptoms, have recently tested positive for COVID, or are required to quarantine. This precaution will help reduce risk and keep everyone safer.

If you do miss class because of illness:

- Make a connection early in the term to another student or a group of students in the class. You can help each other by sharing notes. If you don't yet know anyone in the class, post on the discussion forum to connect with other students.
- Consult the class resources on Canvas.
- Use the discussion forum for help.
- Come to office hours (they're online, so you can join from anywhere).
- See the marking scheme for reassurance about what flexibility you have.
- Lectures will be recorded and the URL link will be posted after each class. However, it is important to keep in mind that technical glitches are not uncommon with lecture recording and some lectures will not be recorded as a result. **Hence, a recorded lecture is not a guarantee and students should be prepared to obtain notes from a classmate, should a technical glitch arise.**

If you are sick on a final exam day, do not attend the exam. You must apply for deferred standing (an academic concession) through Science Advising no later than 48 hours after the missed final exam/assignment. Students who are granted deferred standing write the final exam/assignment at a later date. Learn more and find the application online:

<https://science.ubc.ca/students/advising/concession>

If I (the instructor) am sick: I will do my best to stay well, but if I am ill, develop COVID symptoms, or test positive for COVID, then I will not come to class. If that happens, here's what you can expect

If I am well enough to teach, but am taking precautions to avoid infecting others, we may have an online session or two. If this happens, you will receive an email on Canvas telling you how to join the class. You can anticipate that this would very likely be a last-minute email. Our classroom will still be available for you to sit and attend an online session, in this (hopefully rare) instance. If I am not well enough to teach, I will post a pre-recorded lecture.