PSYC 333 991 2023W2 Syllabus

Memory: Historical, Clinical & Cognitive Perspectives

Credits: 3

Instructor: Francesco Belardetti, MD, PhD

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Zoom Office hours: Wednesdays 10:00am - noon. Please register in advance to attend each

meeting, by clicking the following link: ZOOM Office Hours

Office hours have a dedicated Canvas/Discussion Forum where students are encouraged to post their questions in advance. All the Office hours meetings will be video recorded, and each resulting

video file will be posted on Canvas/Zoom/Cloud Recordings (tab), at: ZOOM Videos

TA: Chantelle Cocquyt

ccocquyt@psych.ubc.ca

Office hours: by appointment, please email

Learning Material Textbook: *Learning and Memory: From Brain to Behavior* (**4**th **Edition**) Gluck, Mercado & Meyers, ISBN: 9781319207328 - One copy will be on reserve at the Koerner Library.

For alternative versions, see: bookstore.ubc.ca/students/

Pre-Requisites Either (a) PSYC 100 or (b) two of PSYC 101, PSYC 102. PSYC 205, PSYC 207, PSYC 208, PSYC

216, PSYC 217, PSYC 277. There are no co-requisite courses.

Learning
Objectives &
Outcomes

The primary objective of this course is to acquaint students with a range of topics within the major areas of human memory studies, by:

- Systematically exploring the fundamental memory systems, their clinical relevance
- Discussing their key underlying historical ideas and developments
- Outlining the neural correlates of memory processes within each system

At the end of this course, students are expected to be able to:

- Integrate novel findings within the context of the acquired framework
- Outline the clinical examination of subjects with memory deficits
- Discuss the key relationships between memory and learning, human development, socio-economical status and multi-generational trauma
- Communicate more effectively and concisely in writing

Learning Activities This course requires two web platforms: Canvas (canvas.ubc.ca), for critical learning activities, including assignments, announcements, posting video and PowerPoint files, grades, and Turnitin Turnitin.com for all submissions and originality assessment of the papers submitted. Therefore, it is essential that you are registered with both platforms at the start of this course. Zoom is also used extensively for all interactions, including the Final exam.

This course is fundamentally based on the textbook content and organized in Modules. Specifically for the textbook, detailed *reading assignments* are provided: page numbers for the main body, specific figures, summary boxes and definitions (printed at the side margins). You may want to start each Module from this material.

The Module web pages, which are published in a staged sequence at the indicated dates (see below *Course Schedule and Assigned Readings*), are provided to accompany the reading assignments with explanatory *Notes*, additional figures, activities - thus expanding and summarizing the central message from the textbook. For each Module, the same material is also available in downloadable PowerPoint sets of *slides*. In parallel, activities aimed at enhancing your interest are provided, for example with *quizzes* about interesting points, *video links* to illustrate clinical cases, classical *psychological tests* whenever possible. You'll also notice that some content is discussed in detail, some instead is only summarized: this is meant to indicate that only the first is considered important for our course. Finally, to complete your learning efforts, it is highly encouraged to engage with the interactive, 'social' dimension: *Discussions*, *One-minute papers*, *Office hours* and emails.

For Module subjects and important dates, see below *Course Schedule and Assigned Readings* (for each Chapter, the page numbers are detailed on each Module Overview, in Canvas). In this course, I may use "Learning Analytics" with Canvas to view overall class progress.

Assessment of Learning

COURSE EVALUATION Students are expected to complete...

Appraisal Tool	Dates		Points, as % of	Final Grade
Essay - Outline	start: Jan 8			
	by: Feb 9		10 pts	
Essay - Full				
	by: Mar 8		20 pts	30
Online Discussions	Jan 8 - Apr 12	max 5 comments total, 2/unit max	4.2 pts each	21
Final Exam	TBD, Apr 16 - 27			49
Spot the Error Bonus Credit*	Jan 8 - Apr 12	max 3 total, original only	1 pt / error	3
HSP Bonus Credit*	Jan 8 - Apr 12			3

* Please note that any credit earned from "Spot the Error", HSP or the library option will be added at the end of term ABOVE and BEYOND the final assessed grade, and AFTER any scaling that may have been applied. More details for each evaluation tool available below.

Four main tools are in place to assess learning: *Essay outline*, *Full essay*, *Online discussions* and *Final exam*. These are introduced below. However, <u>please note that it is essential to read and follow also the detailed instructions provided on Canvas, which include for example size limits and other essential rules.</u>

Essay: Students have a choice of different topics for the Essay, as detailed on Canvas/ Assignments. The Essay is comprised of two parts written in sequence, which are evaluated separately but meant to be consistent with each other, i.e. on the same topic. First, an **Outline** is to be submitted by Feb 9th, 2024. After submission and grading of this outline, students will receive a *feedback* from the T.A. that will guide the writing of the full version. The **Full Essay** is submitted by Mar 8th, 2024.

Write your ID number, as well as your name on both parts of your essay, exactly as it appears on current, official UBC records. Do not copy the topic question selected, only the relative number. For both components of the Essay, only submissions to <u>Turnitin.com</u> of a PDF file are considered valid, and the timestamp by Turnitin determines the time of these uploads. Students are personally responsible for verifying that their files have been successfully submitted. Late deductions for both parts of the Essay start at midnight of the respective cutoff dates for submission, and these will accumulate at a rate of 0.5 point per day (or fraction thereof) until the final cutoff for submission at midnight on Mar 31st, 2024. If students switch Essay topic for the full version, after their submission of the outline, there is a fixed deduction of 2 points.

Online discussions: During the course, multiple written discussions will be initiated on Canvas, by the instructor, or by the TA or by the students. These may involve content, theories or research within the content. Students are expected to engage occasionally in these discussions by writing 5 original and meaningful comments over the course of the term, with a maximum of 2 comments per Unit 1 & 3, but a larger maximum of 3 comments for Unit 2. To be acceptable for grading, each comment must be made on a separate discussion, i.e., students cannot receive points twice for 2 comments on the same discussion, only once. Students are welcome to comment on discussions above the minimum requirement, but only the first 2 'best' comments will be graded in any given unit, on different discussions. To receive the maximum 4.2 points, the comment must show critical thinking about the topic and contribute positively and meaningfully to the discussion.

At the beginning of each module, at least three new discussions will be posted on Canvas/Discussions. To be eligible for grading, contributions must be written no later than the start of the next Module with the new set of threads in the new Discussion.

Additional points will not be assigned for extra comments made beyond the maximum of 2 per Unit and 5 total points.

Final exam: The Final exam will last 120 minutes and consist of four long answers (LAs, i.e. short-essays). It is open-book, administered online and synchronously for all students, and submitted by uploading each paper on <u>Turnitin.com</u>. Much like for he Essay, students are personally responsible for verifying that their files have been successfully submitted. The Final exam will have to be completed strictly within the allocated time frame and will be based on all Module contents (assigned readings, web pages and slides of each Module, embedded activities and discussion forums), as well as on all discussions and any relevant Canvas postings.

On the Final exam day, students should do the following:

- Bring their ID Student Card.
- Well in advance of the starting time, open *Turnitin* (where the exam will be uploaded) using Chrome as well as *Canvas/Zoom*, using the registration link to be provided.
- Login on Zoom: Zoom's shared screen is used for displaying the LA questions and for two-way communications via the chat room.
- No additional time is given to students who arrive late.
- Open the Word file (or similar) to be used for writing the LAs, and write down their ID number, name, the numbers of the questions selected, NOT the full questions.

- Answer all the selected questions, making sure to wrap up all the work in time and within the space limits.
- Submit the completed paper converted into PDF by upload on Turnitin. Only PDF submissions to Turnitin are acceptable, and only the timestamp by Turnitin determines the time of submission.
- Verify IMMEDIATELY whether their file was properly uploaded on Turnitin.

At the end of the allocated writing time of the Final exam, a 5 min interval will be allowed for the upload of the completed work on Turnitin. Only after this 5 min period, deductions for late submission will accumulate, 2 points for the initial five minutes and then 5 points every five minutes. This steep penalty curve is meant to replicate the situation of traditional, in person exams, in which exams strictly terminate at the end of the allocated time.

Students on a different time zone should notify the instructor by email in advance, to arrange a separate session of the Final exam, on a time slot suitable to all parties. Students should contact the TA directly if they wish to review their work, once the grades have been posted. Please note that Canvas is NOT used for ANY submissions, only as a source for information.

Bonus Credit Points

Spot-the-error bonus credit points. Students can earn up to 3 bonus credit points by spotting errors on the module contents, including the attached slides, and on any part of the Canvas introduction and instructions including the Syllabus. After identifying a potential error, the student should immediately communicate the relevant information to the instructor using an email that in turn should provide clear indications about the exact location of the error and a brief justification of why the finding is considered an error. To be eligible for 1 credit point to a given student, an error must be original AND meaningful, i.e. not discovered previously by another student and involving scientific content, logic or their combination. Simple typos, misspellings, missing words or unclear sentences do not count toward a potential credit: However, we would appreciate receiving this extra information anyway!

HSP bonus credit points. You can gain research experience by serving as a participant in one of the many different psychological studies that are being conducted by the department. For each hour of experimental participation, you can earn one credit towards your final grade. Students may earn up to 3 extra credit points, including 0.5 points for the prescreening, for possible 3 maximum points added to the final grade. You can sign up for studies by visiting https://ubc-psych.sona-systems.com/ . If you prefer, you can earn these same extra credits by completing a library-writing project, in which you read and summarize a peer-reviewed research article. You can find out more about how you can earn extra credits at https://psych.ubc.ca/hsp . There you will find a detailed guide about how to participate in the HSP, how-to videos, timelines and a list of frequently asked questions. If students intend to apply the credit points to their grade in PSYC 333 (including those from the Library Option), they must assign them to this course by the end of January 2024. Any points that remain unassigned past this deadline will not contribute to the grade in PSYC 333. Note that credit points for a term paper (library-writing project) are assessed INSTEAD of experimental participation; it is not possible to earn extra credit for both. However, students are welcome to add any credit points from HSP/library-writing to those earned from 'spot-the-error'.

Grades Scaling

The Department of Psychology has a policy regarding grade distribution in Psyc 300-level courses. Faculties, departments and schools reserve the right to scale grades in order to maintain equity among sections and conformity to university, faculty, department or school norms. Grades are not official until they appear on a student's academic record.

Missed/Late Assignment & Exam Policy

NON-EMERGENCY TRAVEL IS NOT A VALID EXCUSE FOR MISSING AN ASSIGNMENT OR EXAM. Acceptance will be strictly based on UBC policies and regulations on the matter, as recently updated.

In general, if students miss marked coursework for the first time and the course is still inprogress, they should immediately submit a Student Self-Declaration to the instructor so that their in-term concession case can be evaluated. If this is not the first time students have requested concession or classes are over, students should fill out Arts Academic Advising's online academic concession form immediately, so that an advisor can evaluate your concession case. For students in a different Faculty, please consult your Faculty's webpage on academic concession (please note that all three above are active links.)

In addition, all excuses, including travel for varsity sports or extracurricular events, are only subject to acceptance if:

- (a) the student has notified the instructor via email *prior to the due date* (for the assignment) or before the start of the exam AND
- (b) within the next three days the student has submitted a Student Self-Declaration form or an Academic Concession form, as appropriate (see above).

If students miss the due date of submission of the two components of the Essay in the presence of a documented and valid excuse (see above) and submit their essay within the final cutoff time, then the late deductions will not be applied. Transfer of the Essay and/or the Online discussions' weight to the final is not allowed.

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. The Department subscribes to Turnitin – a service designed to detect and deter plagiarism. All materials (term papers, essays, etc.) that students submit for grading will be scanned and compared to over 5 billion pages of content located on the Internet or in Turnitin's own proprietary databases. 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, please consult your instructor. For details on pertinent University policies and procedures, please see (http://www.calendar.ubc.ca/vancouver/?tree=3,54,111,959).

Important Privacy Note

Please note that in this course, students will be required to use Turnitin, an online service. During the account creation process, Turnitin will collect your name and other identifying information. By using Turnitin, you are consenting to the storage of this information in the United States. If students choose not to provide your consent, see the instructor or the TA to make alternate arrangements.

Copyright Note

All materials of this course (Module web pages and all their contents, lecture slides, videos, assessment material) are the intellectual property of the Course Instructor 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) may constitute a breach of copyright laws and may lead to academic discipline.

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.

Below you will find a list of resources you may want to utilize if you are struggling in any way to manage your responsibilities while in school or the stresses of life in general.

The Kaleidoscope: https://the-kaleidoscope.com/

A confidential peer-run mental health support group that takes place on campus at least once a week. You may attend the group if you are experiencing any kind of mental health related challenges, or if you're just feeling stressed about school in general. Registration is not required to attend the group. See the website for meeting times and locations. Food and drink are provided.

• **Counselling Services**: https://students.ubc.ca/health/counselling-services
Phone number: 604-822-3811

Counselling services offers a variety of resources to help you maintain your mental health while in school. You may see a counsellor on an individual basis, attend group counselling, or to document an illness if you should require academic concession.

• SpeakEasy: https://www.ams.ubc.ca/student-services/peer-support/

Phone number: 604-822-9246

A student run service that offers confidential support for students experiencing crisis. Also a good resource for additional information and referrals within the UBC community.

• Centre for Accessibility: https://students.ubc.ca/about-student-services/centre-for-accessibility

604-822-5844 Provides accommodations for students living with physical or mental disabilities.

• Student Health Services: https://students.ubc.ca/health/student-health-service 604- 822-7011

Student health provides students with a variety of healthcare related services to help you maintain your health while studying. Access to doctors and registered nurses.

- Live Well, Learn Well: https://students.ubc.ca/health The Live Well, Learn Well initiative is a resource hub that provides students with information to help improve physical and mental wellbeing.
- Mental Health Awareness Club: https://ubcmhac.sites.olt.ubc.ca/ A club that offers opportunities to speak about mental health with others and strives to promote mental health awareness throughout the UBC community.
- Pacific Spirit Addiction Services: 3rd Floor, 2110 West 43rd Ave Vancouver B.C. V6M 2E1 Phone number: 604-267-3970 A free and confidential service for youth and young adults up to the age of 24. Services include counselling, access to an addiction physician including usage of a methadone maintenance program - and a drug education series.
- AMS Food Bank: https://www.ams.ubc.ca/student-services/food-bank/ If you are in a financial emergency AMS food bank can provide you with a food hamper. You are able to use the service up to 6 times each term.
- UBC Psychology Clinic: https://clinic.psych.ubc.ca/ Professional psychological services provided to the community, including assessment & treatment for children, adults & families by clinical psychology trainees.
- **BC Crisis Center**: https://crisiscentre.bc.ca/ Phone number: 604-872-3311Non-profit, volunteer-driven organization that provides emotional support to youth, adults, and seniors in crisis in BC. Crisis line available 24/7.
- **Distress Line**: Phone number: 1-800-Suicide (784-2433) If you are in distress or are worried about someone in distress who may hurt themselves, call 1-800-SUICIDE 24 hours a day to connect to a BC crisis line, without a wait or busy signal.

Course Schedule & Assigned Readings - 2024

Start Date:	Module/Lecture # & Topics: Keep up with your readings ->	Readings:
UNIT1 →	The Foundation: The Idea of Memory and its Neural Basis	
Jan 8	ESSAY Outline Start	
Jan 8	1. INTRO TO MEMORY & LEARNING, HISTORICAL OUTLINE	Ch 1
	The Syllabus; Aristotle, Descartes, Locke	
Jan 11	2. THE NEURAL BASIS	Ch 2
	Darwin, Cajal & Hebb	
UNIT 2 ->	The Memory Systems: Explicit versus Implicit	
Jan 19	3. EXPLICIT MEMORIES: EPISODIC & SEMANTIC	Ch 7
	Cognitive perspective, the Hippocampus and the contribution of H.M.	
Jan 29	4. A 'CLASSICAL' IMPLICIT MEMORY: PAVLOVIAN CONDITIONING	Ch 4
	The Rescorla-Wagner model, the cerebellum and a link to Skill memories	
Feb 9	ESSAY Outline Due	
Feb 9	5. SIMPLE FORMS OF IMPLICIT MEMORY: NON-ASSOCIATIVE	Ch 3
	Habituation, Sensitization and Priming: from sea slugs to the visual cortex	
Feb 16	6. COMPLEX IMPLICIT MEMORIES: SKILLS	Ch 8
	Cognitive and neural outline, Parkinson's disease	
Feb 19-23	Midterm break	
UNIT 3 ->	The Unity of the Mind: How Memory Systems work together	
Mar 1	7. EMOTIONS & MEMORY	Ch 10
	How Emotions impact Memories: Drugs, Amygdala & PTSD	
Mar 8	Full ESSAY Due	
Mar 11	8. WORKING MEMORY: THE PLAYGROUND OF OUR MEMORIES	Ch 9
	Evolving cognitive models, testing mice and men, frontal lobes and schizophrenia	
Mar 22	9. CONSOLIDATION, RE-CONSOLIDATION & SLEEP	Chs 7, 10
	Memories are not fixed: eye witness errors, pruning, re-scaling, the importance of	·
Mar 29	10. AGING & DEVELOPMENT	Ch 12
	Memory and brain growing up, and then old; social relationships and language	01. 7. 17
Apr 8	11. AMNESIAS & ALZHEIMER'S	Chs 7, 12
	Infantile amnesia and amnesias from neurodegeneration	
16.07		
Apr 16-27	FINAL EXAM – (TBA)	