### PSYC 333.002 Syllabus

# Memory: Historical, Clinical & **Cognitive Perspectives**

Credits: 3

Instructor: Dr. Francesco Belardetti T.A.: **Brett Hathaway** 

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or by appointment.

\* Please note that emails may not be returned for up to 48 hours.

Learning Material

Textbook: Learning and Memory: From Brain to Behavior (4th Edition) Gluck, Mercado & Meyers, ISBN: 9781319207328 - One copy will be on reserve at the Koerner Library (2 hour loan). Estimated cost for loose-leaf version \$111.99. For alternative versions, see:

https://shop.bookstore.ubc.ca/courselistbuilder.aspx

Pre-Requisites 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. 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, by:

- Exploring the basic categories of memory, their clinical implications and historical roots
- Reviewing the neural correlates for memory processes
- Exploring simple mathematical, network, and animal models of memory in support of theoretical understanding
- Discussing the applications of current knowledge to real world issues and
- Considering new important findings from primary research that have the potential to radically alter the way we think about memory

In parallel, students will learn to:

- Collect information supported by evidence, and analyze data
- Recognize when previous knowledge has to be re-evaluated as a result of new discoveries
- Fit newly gained information into a growing framework of understanding
- Develop well thought out and supported arguments
- Communicate effectively in a manner acceptable to the audience, in a variety of modes
- Collaborate effectively with other contributing participants in group work
- Manage projects and course work together with other commitments
- Reflect on your learning and how it relates beyond this course

#### Learning Activities

Lectures will be delivered online, synchronously via Zoom: <a href="https://ubc.zoom.us/signin">https://ubc.zoom.us/signin</a>. The time of the lectures is Mon/ Wed/ Fri 9:00am - 9:50am, The choice of synchronous presentations is intended to facilitate our interactions. Again, to this purpose, I do value attendance of the students, greatly encourage critical thinking and productive exchanges between all of us. Students should feel free to ask questions during the lecture and afterwards. It is also extremely important that before each lecture students read the assigned textbook pages and download/read the relevant slides from Canvas. Students may be asked on a voluntary basis to send me at the end of the lecture one-minute papers and/or brief end-of-the-lecture comments, as instructed. See also below, on page 7 of this Syllabus, the detailed Schedule of Topics with the required readings and lecture subjects. In this course, I may use "Learning Analytics" with Canvas to view overall class progress.

#### **Behavior**

During the lecture, negative behavior of any kind disturbs classmates and instructor, and it is disrespectful. For the same reasons students should arrive on time and ready to work, and be prepared to stay until the end (students coming and going are far more 'visible' online than in a physical classroom). If you frequently violate these policies you may be singled out to discuss with me privately to explain yourself, and may be penalized 2% for each meeting.

## Assessment of Learning

Appraisal Tool	Points			Dates
Mid-Term	21%			Feb 12, 2021
Essay	30%	start: Jan 13, 2020		
		10% of total points	outline,	due: Feb 26, 2021
		20% of total points	full version,	due: Apr 9, 2021
Final	49%			Apr 18-29, 2021
Total Base Points Available:	100%			
HSP Bonus Credit	3% *			

<sup>\*</sup> Please note that any credit earned from 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

The Mid-Term exam will last 50 (fifty) minutes and consist of long answers (LAs, i.e. short-essays). The Final exam will be cumulative, last 2 (two) hours, and will also consist of LAs. Both the Mid-Term and the Final will be administered online, simultaneously for all students, and submitted on <a href="https://www.turnitin.com">www.turnitin.com</a>. Students that don't have a Turnitin account already will need to create well in advance their own user account. Both exams will have to be completed within the allocated time frame. Both exams will be 'open-book', based on lecture materials (slides, verbal presentations and discussions), all the required readings (see p.7 below), as well as any relevant Canvas postings (including all Discussion blogs).

On the Mid-Term and Final exam days, students should do the following:

- Bring their ID Student Card.
- Open Turnitin (where the exam will take place) as well as Canvas (used for two-way communications, including video check of the Student card).
- Be sure to join on time since no additional time is given to students who arrive late.
- Write their ID number, as well as their name, on the exam document.
- Answer the questions, making sure to wrap up all the work in time.

At the end of the allocated writing time of both the Mid-Term and the Final exams, a 5 min interval will be allowed for the upload of the completed work on Turnitin. Only after this 5 min period, deductions

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for late submission will accumulate, 2 points for the initial five minutes and then 5 points every five minutes. Additional, detailed instructions will be available on Canvas at the appropriate time. Students should contact the TA directly if they wish to review their midterm and essay outline (see below), once the grades have been posted. This review will be available until the last day of classes, if appropriate.

Essay - On Jan 13<sup>th</sup>, specific instructions for the Essay are made available on Canvas and discussed during the lecture. These instructions will include a choice of different topics for the essay. The Essay is comprised of two parts, which are evaluated separately but are meant to be consistent with each other, i.e. on the same topic. First, an outline is to be submitted by Feb 26<sup>th</sup>. This part should be between 200 and 500 words, without references. After submission and grading of this outline, students should request a feedback from the T.A. because the result will guide the writing of the full version. The full version of the essay is then submitted, based on the outline and any feedback, no later than 11:59pm, Apr 9<sup>th</sup>. This second part should be between 1000 and 1200 words and requires a short reference list. For both components, no class hardcopy is submitted, only the electronic submission on <a href="https://www.turnitin.com">www.turnitin.com</a> is required. Write your ID number, as well as your name on both parts of your essay, exactly as it appears on current, official UBC records.

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 5% per day (or fraction thereof) until the final cutoff for submission at midnight on Apr 14<sup>th</sup> 2021. If students switch Essay topic for the full version, after submission of the outline or after Feb 26<sup>th</sup>, there is a deduction of 2 points.

Credit Points: Experiment Participation One way to learn more about psychology is to be a participant in ongoing research projects. Students may earn up to 3 extra credit points (for a possible 3% added to your final grade) toward your course grade by participating in studies that are posted on <a href="https://ubc-psych.sona-systems.com">https://ubc-psych.sona-systems.com</a>. Students should register in this online system on time (date TBA). If students intend to apply the credit points to their grade in PSYC 333 (including those from the Library Option, see below), they must assign them to this course by the end of February. Any points that remain unassigned past this deadline will not contribute to the grade in PSYC 333.

Credit Point: Alternative: Library Option As an alternative to participating in studies, students may choose to complete library-writing projects, in which they read and summarize a research article; each article summary counts as one hour of research participation. If you choose the library option, you must notify Dr. Belardetti by the end of January. Students are to submit their article and their summary to <a href="www.turnitin.com">www.turnitin.com</a>. For the library assignment, the class ID, class name and password are TBA. See <a href="www.turnitin.com">www.turnitin.com</a>, and click on the "Training" link at the top of the page for detailed instructions on how to submit papers to <a href="www.turnitin.com">www.turnitin.com</a>. All of the credits for study participation or the library option will be added to the final course grade, after any scaling that may have been applied. 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.

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 <u>Student Self-Declaration</u> to me so that the interm concession case can be evaluated. If this is not the first time students have requested concession or classes are over, students fill out Arts Academic Advising's online academic <u>concession form</u> immediately, so that an advisor can evaluate your concession caseFor students in a different Faculty, please consult <u>your Faculty's webpage on academic</u> concession.

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 Mid-term with a documented and valid excuse, the weight of this exam will be transferred to the final exam. If students miss the due date of submission 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 weight to the final is not allowed. Even in the presence of a valid and documented excuse*, if an essay is completed beyond the final cutoff time, then the student can obtain a Standing Deferral from UBC to avoid penalties.

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 guestion. 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 (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 (course handouts, lecture slides, videos, assessment) 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) constitutes a breach of copyright and may lead to academic discipline. Students will be permitted to record the classes only with his written permission, and only for the audio portion (i.e. no video recording is allowed in any case).

## 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 <a href="mailto:the UBC Senate">the UBC Senate</a> website.

#### Wellness Resouces

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: 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: students.ubc.ca/livewell/services/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: ams.ubc.ca/services/speakeasy/

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.

SHARE: www.vivreshare.org

Self Harm Anonymous Recovery and Education is a program designed to promote self care and educate about self harm. SHARE support groups meet biweekly; times and locations can be found on their website.

UBC Wellness Centre: students.ubc.ca/livewell/services/wellness-centre

Phone number: 604-822-8450

Speak with other students about tips for managing stress, keeping healthy sleep and eating patterns, concerns about safe sex and more.

Access and Diversity: students.ubc.ca/about/access

604-822-5844

Access and Diversity provides accommodations for students living with physical or mental disabilities.

**Student Health Services:** *students.ubc.ca/livewell/services/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.

Mood Disorders Clinic UBC: ubc-mooddisorders.vch.ca/

A psychiatric program designed specifically to treat individuals living with depression or bipolar disorder.

Live Well, Learn Well: students.ubc.ca/livewelllearnwell

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: 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

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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: ams.ubc.ca/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: 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: crisiscentre.bc.ca

Phone number: 604-872-3311

Non-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.

This plan is subject to change. Changes will be announced in class and posted on CANVAS

Week	Date	Торіс	Required Reading	Notes				
	Jan 11	Course Intro & Syllabus, Historical Perspectives	<b>READ</b> : Ch 1: pp.1-21	Most important: Tables 1.1; Definitions: pp.2-21; Figs: 1.1, 1.3> 1.6; Synthesis pp. 30-31				
1	Jan 13	Historical Perspectives		ESSAY start Jan 13 - Instructions discussed				
	Jan 15	A Neural Basis for Memory	READ: Ch 2: pp.35-55, 57-65; Skip: ERPs p.53; "How Remembering" p.55- 57; "How Researchers" p.65-70; Boxes pp.36, 65, 70	Most important: Definitions: pp.37-53, 59-64; Figs. 2.1, 2.2B, 2.3, 2.4, 2.5B, 2.7> 2.10, 2.12 > 2.14, 2.16; Boxes pp.60, 62, 65; Synthesis pp.70-71.				
	Jan 18	Neural Basis						
2	Jan 20	Declarative: Episodic & Semantic	READ: Ch.7: 277-96, 298-310 (gaps in pages to be filled later); Skip: "Memory ConsReconsol", pp. 296-98, "The Basal" p.310-322; Box p.290.	Most important: Tables 7.1; Definitions: pp.278-309; Figs: 7.2> 7.7, 7.10> 7.16; Boxes pp.284, 300; Synthesis pp.322-24.				
	Jan 22	Episodic & Semantic						
	Jan 25	Neural Substrates of Episodic & Semantic						
3 Jan 27		Non-Declarative: Classical Conditioning	READ: Ch.4: pp.121-43, 146-61, 166-70; Skip: "Error Corr, in Human." pp.143-46; "Invertebrates". pp.161-165,	Most important: Tables 4.1> 4.8; Definitions: pp.122-55, Figs. 4.3, 4.7> 4.11, 4.15> 4.20; Boxes pp.130, 149, 160; Synthesis p.170.				
	Jan 29	Classical Conditioning	1					
	Feb 1	Neural Basis of Classical Conditioning						
4	Feb 3	Clinical Perspectives of Classical Conditioning						
	Feb 5	REVIEW						
Feb 8 Er		Emotions in Learning & Memory	<b>READ</b> : Ch.10: pp.417-430, 432-46, 447-451, 453-61.	Most important: Table 10.1; Definitions pp.418-456; Figs.10.2, 10.3, 10.5 -> 10.14, 10.16, 10.17; Boxes: p.424, 433, 451; Synthesis: pp.461-62				
5	Feb 10	Emotions in Learning & Memory	Skip: "Cond. EscapeAvoidance", pp.430- 32, "Conscious Feelings" pp.446-47; "Stress Hormones" pp.451-52					
	Feb 12 MID-TERM 1							
	Feb 15-19	Family Day & Mid-Term Break	_					
	Feb 22	Emotions in Learning & Memory: Neural substrates						
6	Feb 24	Emotions in Learning & Memory: Clinical Perspectives						
	Feb 26	Sensory, Short-Term & Working Memory	READ: Ch.9: pp.369-88, 391-409	>>> Essay OUTLINE due Feb 26 <<<<				
	Mar 1	Working Memory	Skip: Are Working" pp.388-90	Most important: Tables 9.1, 9.2; Definitions pp.				
7 Mar 3		Working Memory	"ADHD" pp.410-12	370-94; Figs. 9.1> , 9.10, 9.12> 9.20, 9.23				
	Mar 5	Working Memory: Neural Mechanisms		Boxes pp. 380, 388, 390; Synthesis pp.412-13				
	Mar 8	Working Memory: Clinical Perspectives						
8	Mar 10	Non-Declarative: Non-Associative Memory	<b>READ</b> : Ch.3: pp.76-103, 105-10	Most important: Definitions pp.77-78, 83-95				
	Mar 12	Non-Associative Memory	Skip: "Dual, Opp" pp.84-86; box p.80	Figs. 3.1, 3.4> 3.16,				
Mar 15		Non-Associative Memory: Neural Mechanisms	"Spatial" pp.93-95, "Hippocampal"pp.106-110	Boxes p. 86, 91, 92, 101; Synthesis 116-17				
9		Mar 17         REVIEW           Mar 19         REVIEW						
	Mar 22	Non-declarative: Skills	READ: Ch.8: pp.329-63	Most important: Tables 8.1, 8.2;				
10	Mar 24	Skills	Skip: boxes pp.343, 352	Definitions: pp. 330-62; Figs. 8.1> 8.12;				
	Mar 26	Skills: Neural Mechanisms		Boxes pp. 332, 345, 358				
	Mar 29	Non-declarative: Skills, Clinical Perspective		Synthesis p.365				
11	Mar 31	Consolidation & Reconsolidation	<b>READ</b> : Ch.7: pp.296-98, 311-15, Ch 10: pp.451-52.	Most important: Definitions pp. 296-98; Figs. 7.9, 7.17; Box p.451				
	Apr 2	Holiday		· · · · · · · · · · · · · · · · · · ·				
	Apr 5	Holiday						
	Apr 7	Memory & Sleep	Read Ch.7: pp.315-318	Most important: Definitions p. 315; Figs.7.20, 7.21.				
12	Apr 9	Amnesias: Long- and Short-Term	<b>READ</b> : Ch.7: pp.318-322.	Most important: Definitions p.320-21, Box p.319. >>>>>FULL ESSAY Due Apr 9 <<<<				
	Apr 12	Aging & Memory	<b>READ</b> : Ch.12: pp.501-21, 523-30, 533-38;	Most important: Definitions: pp.502-27;				
13	Apr 14	Aging & Memory: Neural Mechanisms	READ: Ch.3: pp.104-05; Ch.12: pp.538-46; Skip: "Selective" pp.521-523, "Effect of Sex" pp.530-533, "Male" pp.514-15, "Metamemory" pp.518-19	Most important: Definitions: pp. 539-42; Figs. 12.12 -> 12.14; Box p.546; Figs. 12.1> 12.77, 12.9> 12.11; Boxes: pp.512, 519, 530; Synthesis p.547				

Apr 18 - 29, 2020

FINAL EXAM: Both dates are included. The final exam is cumulative, i.e. all lecture material, relevant Canvas discussions and all required readings are covered