

PSYC 333.002 Syllabus

# Memory: Historical, Clinical & Cognitive Perspectives

Credits: 3

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

Learning Material Textbook: *Learning and Memory: From Brain to Behavior (4<sup>th</sup> 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/coursebuilder.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

The location and time of the lectures is **Buchanan-A Room 104**, on **Mon/Wed/Fri 9:00am-10:00am**. I do value your attendance, and greatly encourage critical thinking and productive interactions between instructor and students, TA and students as well as among students. To make it a fully productive experience for everybody, please feel free to ask questions during the lecture and afterwards. *Before* each lecture, please read the assigned textbook pages and download/read the relevant slides from *Canvas*: [www.canvas.ubc.ca](http://www.canvas.ubc.ca) . Please bring a pencil and a notepad to the lecture: you may be asked on a voluntary basis to write down one-minute papers and/or brief end-of-the-lecture comments, as instructed. See also below the detailed *Schedule of Topics*, with the required readings and lecture subjects, on page 7 of this Syllabus. In this course, I plan to use “Learning Analytics” with Canvas to view overall class progress.

Behavior

If you are chatting during the lecture I will ask you to be quiet and/or I may ask you to leave. Disruptive behavior of any kind disturbs your classmates and it is disrespectful. For the same reasons you should arrive on time and ready to work, and be prepared to stay until the end. If you frequently violate these policies you may be singled out to meet me privately to explain yourself, and you will be penalized 2% for each meeting.

Assessment of Learning

Appraisal Tool	Points	Dates
Mid-Term 1	15% *	Feb 3, 2020
Mid-Term 2	15% *	Mar 13, 2020
Essay	20%	start: Jan 8, 2020 4% of total points outline, due: Feb 14, 2020 16% of total points full version, due: Apr 1, 2020
Final	50% **	Apr 14 - 29, 2020 time/location: TBA
Total Base Points Available:	100%	
HSP Bonus Credit	3% ***	
* 7.5% multiple choice, 7.5% long answers - the total duration of each Mid-Term is 50 minutes. ** multiple choice <b>only</b> - the total duration of the Final Exam is <b>2 hours</b> . *** 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		

There will be two Mid-Term exams. Each Mid-Term exam will consist of both multiple choice and long answers questions (i.e. short-essays) and each will last **50 minutes**. One or two multiple choice questions of the Mid-Terms may cover the content of this Syllabus. Both the Mid-Term 2 and the Final exam will be **cumulative**, but with an emphasis on material covered since the last Mid-Term. The Final exam will consist of multiple choice questions only and will last **2 hours**. All exams will be based on lecture materials (slides, presentations and discussions), Canvas postings (including all Discussion blogs) and all the required readings.

On the exam days, please do the following:

- **Bring your Student Card or other picture ID**
- Write your name on any paper exactly as it appears on the official UBC records
- Bring at least one HB pencil
- Be sure to arrive on time since no additional time is given to students who arrive late

NOTE: If you fail to fill the scantron with your ID number or answers (i.e. you haven't transferred the answers from the booklet to the scantron) by the end of the test period, you will be given time to do so at a penalty of 5% of your exam grade per minute (or part thereof) required.

Midterms are available for review during the TA office hours once the grades have been posted, and will be available for review until the last day of classes. Please contact the TA directly if you wish to review your midterm.

Essay - On Jan 8<sup>th</sup>, specific instructions for the Essay are made available on Canvas and discussed in class. 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 14<sup>th</sup>. This part should be between 200 and 500 words, without references. After submission and grading of this outline, your request of feedback from the T.A. is highly encouraged and 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 Apr 1<sup>st</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 [www.turnitin.com](http://www.turnitin.com) is required. If you don't have a *Turnitin* account already (from a previous course), you will need to create a user account in *Turnitin*. 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 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 8<sup>th</sup> 2019. If you switch Essay topic for your full version, after submission of the outline and after Feb 14<sup>th</sup>, you are subject to a deduction of 4 points.

**Credit Points: Experiment Participation** One way to learn more about psychology is to be a participant in ongoing research projects. You 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 <https://ubc-psych.sona-systems.com>. Please register in this online system on time (date TBA). You can also earn your first half hour of credit by completing the Pre-screening Questionnaire 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). If you intend to apply your credit points to your grade in PSYC 333 (including those from the Library Option, see below), you must assign them to this course by the end of February. Any points that remain unassigned past this deadline will not contribute to your grade in PSYC 333.

**Credit Point: Alternative: Library Option** 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. If you choose the library option, you must notify Dr. Belardetti by the end of January. You are to submit your article and your summary to [turnitin.com](http://turnitin.com). For the library assignment, the class ID, class name and password are TBA. See [www.turnitin.com](http://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*. 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. 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. If you miss marked coursework for the first time (assignment, exam, presentation, participation in class) and the course is still in-progress, immediately submit a Student Self-Declaration to me so that your in-term concession case can be evaluated. If this is not the first time you have requested concession or classes are over, fill out Arts Academic Advising's online academic concession form immediately, 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](#).

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

**(a)** you have notified your 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* you have submitted a Student Self-Declaration form or an Academic Concession form, as appropriate (see above).

If you miss one Mid-term with a documented and valid excuse, the weight of this exam will be transferred to the final exam. However, *even with a documented and valid excuse, this transfer of weight to the final can be allowed for one Mid-term only*. For a second validly excused mid-term, a deferred mid-term session must be arranged at the discretion of the instructor within a reasonable number of days. If you miss the due date of submission of the essay in the presence of a documented and valid excuse (see above) and submit your 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 for whatever reason a deferred mid-term session cannot be arranged or if an essay is completed beyond the final cutoff time, then the student can obtain a Standing Deferral from UBC.

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 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 you choose not to provide your consent, see the instructor 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).

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](#).

## Wellness Resources

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](http://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](http://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/](http://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](http://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](http://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](http://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](http://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/](http://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](http://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/](http://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:** [ams.ubc.ca/services/food-bank/](http://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](http://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](http://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.

# Schedule of Topics

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

Week	Date	Topic	Required Reading	Notes
1	Jan 6	Course Intro & Syllabus, Historical Perspectives	<b>READ:</b> Ch 1: pp.1-21, including intro p.24: "The Cognitive...."	<b>Most important:</b> Tables 1.1; Definitions: pp.2-21; Figs: 1.1, 1.3 --> 1.6, 1.8; Synthesis pp. 30-31
	Jan 8	Historical Perspectives		<b>ESSAY start Jan 8 - Instructions discus'd</b>
	Jan 10	A Neural Basis for Memory	<b>READ:</b> Ch 2: pp.35-55, 57-65; <b>Skip:</b> ERPs p.53; "How Remembering...." p.55-57; "How Researchers....." p.65-70; Boxes pp.36, 65, 70	<b>Most important:</b> 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.
2	Jan 13	Neural Basis		
	Jan 15	Declarative: Episodic & Semantic	<b>READ:</b> Ch.7: 277-96, 298-310 (gaps in pages to be filled later); <b>Skip:</b> "Memory Cons.....Reconsol....", pp. 296-98, "The Basal....." p.310-322; Box p.290.	<b>Most important:</b> 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 17	Episodic & Semantic		
3	Jan 20	Neural Substrates of Episodic & Semantic		
	Jan 22	Non-Declarative: Classical Conditioning	<b>READ:</b> Ch.4: pp.121-43, 146-61, 166-70; <b>Skip:</b> "Error Corr. in Human.." pp.143-46; "Invertebrates.....", pp.161-165,	<b>Most important:</b> 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 24	Classical Conditioning		
4	Jan 27	Neural Basis of Classical Conditioning		
	Jan 29	Clinical Perspectives of Classical Conditioning		
	Jan 31	<b>REVIEW</b>		
Feb 3 <b>MID-TERM 1</b>				
5	Feb 5	Emotions in Learning & Memory	<b>READ:</b> Ch.10: pp.417-430, 432-46, 447-451, 453-61.	<b>Most important:</b> 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
	Feb 7	Emotions in Learning & Memory	<b>Skip:</b> "Cond. Escape....Avoidance", pp.430-32, "Conscious Feelings....." pp.446-47; "Stress Hormones....." pp.451-52	
6	Feb 10	Emotions in Learning & Memory: Neural substrates		
	Feb 12	Emotions in Learning & Memory: Clinical Perspectives		
	Feb 14	Sensory, Short-Term & Working Memory	<b>READ:</b> Ch.9: pp.369-88, 391-413	<b>&gt;&gt;&gt;&gt;&gt; Essay OUTLINE due Feb 14 &lt;&lt;&lt;&lt;&lt;</b>
Feb 17-21 <b>Family Day &amp; Mid-Term Break</b>				
7	Feb 24	Working Memory	<b>Skip:</b> Are Working..." pp.388-90	<b>Most important:</b> Tables 9.1, 9.2; Definitions pp. 370-94; Figs. 9.1 --> , 9.10, 9.12 --> 9.20, 9.23
	Feb 26	Working Memory		Boxes pp. 380, 388, 390; Synthesis pp.412-13
	Feb 28	Working Memory: Neural Mechanisms		
8	Mar 2	Working Memory: Clinical Perspectives		
	Mar 4	Non-Declarative: Non-Associative Memory	<b>READ:</b> Ch.3: pp.76-103, 105-10	<b>Most important:</b> Definitions pp.77-78, 83-95
	Mar 6	Non-Associative Memory	<b>Skip:</b> "Dual, Opp...." pp.84-86; box p.80	Figs. 3.1, 3.4 --> 3.16,
9	Mar 9	Non-Associative Memory: Neural Mechanisms		Boxes p. 86, 91, 92, 101; Synthesis 116-17
	Mar 11	<b>REVIEW</b>		
Mar 13 <b>MID-TERM 2</b>				
10	Mar 16	Non-declarative: Skills	<b>READ:</b> Ch.8: pp.329-63	<b>Most important:</b> Tables 8.1, 8.2;
	Mar 18	Skills	<b>Skip:</b> boxes pp.343, 352	Definitions: pp. 330-62; Figs. 8.1 --> 8.12;
	Mar 20	Skills: Neural Mechanisms		Boxes pp. 332, 345, 358
11	Mar 23	Non-declarative: Skills, Clinical Perspective		Synthesis p.365
	Mar 25	Consolidation & Reconsolidation	<b>READ:</b> Ch.7: pp.296-98, 311-15, Ch 10: pp.451-52.	<b>Most important:</b> Definitions pp. 296-98; Figs. 7.9, 7.17; Box p.451
	Mar 27	Memory & Sleep	<b>Read</b> Ch.7: pp.315-318	<b>Most important:</b> Definitions p. 315; Figs.7.20, 7.21.
12	Mar 30	Amnesias: Long- and Short-Term	<b>READ:</b> Ch.7: pp.318-322.	<b>Most important:</b> Definitions p.320-21, Box p.319.
	Apr 1	Aging & Memory	<b>READ:</b> Ch.12: pp.501-21, 523-30, 533-38;	<b>Most important:</b> Definitions: pp.502-27; <b>&gt;&gt;&gt;&gt;&gt;FULL ESSAY Due Apr 1 &lt;&lt;&lt;&lt;&lt;</b>
	Apr 3	Aging & Memory: Neural Mechanisms	Ch.3: pp.104-05; <b>Skip:</b> "Selective..." pp.521-523, "Effect of Sex....." pp.530-533	Figs. 12.1 --> 12.77, 12.9 --> 12.11; Boxes: pp.512, 519, 530; Synthesis p.547
13	Apr 6	Clinical perspective: Down syndrome & Alzheimer's disease	<b>READ:</b> Ch.12: pp.538-46	<b>Most important:</b> Definitions: pp. 539-42; Figs. 12.12 -> 12.14; Box p.546
	Apr 8	<b>REVIEW</b>		

Apr 14-29, 2020 (incl'd)

**FINAL EXAM: covers all lecture material AND all required readings \***

\* The Final Exam will be scheduled during the regular April exam period, from April 8-26, 2018, both dates are included

To avoid an unexcused absence, DO NOT MAKE TRAVEL PLANS DURING THAT PERIOD until the schedule is posted