

PSYC 333 921 2022S1 Syllabus

# Memory: Historical, Clinical & Cognitive Perspectives

Credits: 3

Instructor: Dr. Francesco Belardetti  
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Zoom Office hours: Wednesday 10:00am - noon or by appointment  
<https://ubc.zoom.us/join/9536715408>

Office hours have a dedicated Discussion Forum and will be video recorded. Each video file will be posted on Canvas, at: [https://canvas.ubc.ca/courses/95367/external\\_tools/15408](https://canvas.ubc.ca/courses/95367/external_tools/15408) (Cloud Rec... tab.)

TA: Brett Hathaway  
[bretthathaway@psych.ubc.ca](mailto:bretthathaway@psych.ubc.ca)  
Office hours: by appointment, please email

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. 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 studies, by:

- Systematically exploring the fundamental memory systems and their clinical relevance
- Discussing the key historical developments that supports our current understanding of learning and memory
- Outlining the neural correlates of memory processes within each system
- Exploring simple memory models employing quantitative approaches
- Discussing the applications of current knowledge to 'real world' issues

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

- Appreciate, discuss and integrate novel findings from memory studies within the learned framework
- Suggest an outline of the clinical examination of subjects with memory deficits
- Propose and defend well-thought experiments to investigate emerging questions at the cognitive, neural or psycho-social levels
- Discuss the key relationships between memory and learning, human development, socio-economical status and multi-generational trauma
- Communicate effectively and concisely in writing

Learning Activities

This course uses two web platforms: Canvas (<http://canvas.ubc.ca>), for most relevant learning activities, including assignments, announcements, posting video and PowerPoint files, grades, and <https://Turnitin.com> for originality assessment of the papers submitted. Therefore, it is essential that you are registered with both platforms at the start of this course.

**This course is fundamentally based on the textbook content** and organized in Modules. Specifically for the textbook, quite 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 a clear indication of what is considered important for our course. Finally, to complete your learning efforts, it is highly encouraged the 'social' dimension: *Discussions, One-minute papers, Office hours* and emails.

For lecture 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	Points, as % of Final Grade	Dates
1 Midterm	21	Jun 22, 2022
1 Essay	30	start: May 16, 2022 by Jun 17, 2022: Outline 10 points by Aug 1, 2022: Full Essay 20 points
1 Final	49	TBD, Aug 15 - 19
HSP Bonus Credit*	2	
* 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. More details for each evaluation tool available below.		

On May 16<sup>th</sup>, specific instructions for the Essay, Midterm, Final are made available on Canvas/Assignments.

The Midterm and the Final exams are both open book, will be administered online, synchronously for all students, and submitted by uploading each file on <https://Turnitin.com>. Again, students that don't have an account already will need to create well in advance their own Turnitin user account. Both exams will have to be completed strictly within the allocated time frame. Both exams will be based on all Module materials (assigned readings, web pages and slides of each Module, embedded activities and discussion forums), as well as on Office hours discussions and any relevant Canvas postings. The Midterm exam will

last 60 (sixty) 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.

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

- Bring their ID Student Card.
- Using Chrome, open Turnitin (where the exam will be uploaded) as well as Canvas/Zoom (used for displaying the LA questions on the shared screen, two-way communications).
- Be sure to join on time since no additional time is given to students who arrive late.
- Write on the exam document their ID number, as well as their name, but NOT the LA question selected: only the relative number.
- Answer all the selected questions, making sure to wrap up all the work in time.
- Only submissions to Turnitin are acceptable, and only the time-stamp by Turnitin determines the time of upload.
- Students are personally responsible for verifying IMMEDIATELY whether their file was properly uploaded on Turnitin.

At the end of the allocated writing time of both the Midterm 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 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 terminate at the end of the allocated time. Additional, detailed instructions will be available on Canvas at the appropriate time. Students should contact a 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.

Students on a different time zone should notify the instructor by email in advance, to arrange a separate session of their Midterm and/or the Final exams, on a suitable time slot.

Essay - Students have 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 June 17<sup>th</sup>, 2022. This part should be between 200 and 500 words, without references. After submission and grading of this outline, students should request the feedback from the T.A. because the result will guide the writing of the full version. Then, based on the outline and any feedback, the Full Essay is submitted by 11:59pm, Aug 1<sup>st</sup>, 2022. This second part should be between 500 and 1000 words and requires a short reference list. For both components of the Essay, only the electronic submission on Turnitin is accepted. 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.

Only the time-stamp 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 1% per day (or fraction thereof) until the final cutoff for submission at midnight on Aug 11<sup>th</sup>, 2022. If students switch Essay topic for the full version, after submission of the outline or after June 17<sup>th</sup>, there is a deduction of 2 points.

More detailed instructions for all assessments are also available under Canvas /Assignments. Please note that Canvas is NOT used for ANY submissions, only as a source of information.

Credit Points:  
Experiment  
Participation  
or Library  
Option

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 2 extra credit points, plus 0.5 points for the prescreening, for possible 2.5 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 June. 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.

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 in-progress, they should immediately submit a [Student Self-Declaration](#) to me so that the in-term 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 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 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 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.
  - **SHARE:** <https://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.

- **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.
- **Mood Disorders Clinic UBC:** [http://www.vch.ca/Locations-Services/result?res\\_id=1276](http://www.vch.ca/Locations-Services/result?res_id=1276)  
A psychiatric program designed specifically to treat individuals living with depression or bipolar disorder.
- **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: 604-872-3311 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.

## PSYC 333 921 2022S1 : Course Schedule, Topics & Assigned Readings

Start Date:	Module # / Topics:	Keep up with your readings ->	Readings:
<b>UNIT 1 → The Foundation: The Idea of Memory and its Neural Basis</b>			
<b>May 16</b>	<b>ESSAY Outline Start</b>		
<b>May 16</b>	<b>1. INTRO TO MEMORY &amp; LEARNING, HISTORICAL OUTLINE</b>		<b>Ch 1</b>
	<i>The Syllabus; Aristotle, Descartes, Locke</i>		
<b>May 18</b>	<b>2. THE NEURAL BASIS</b>		<b>Ch 2</b>
	<i>Darwin, Cajal &amp; Hebb</i>		
<b>UNIT 2 → The Memory Systems: Explicit versus Implicit</b>			
<b>May 25</b>	<b>3. EXPLICIT MEMORIES: EPISODIC &amp; SEMANTIC</b>		<b>Ch 7</b>
	<i>Cognitive perspective, the Hippocampus and the contribution of H.M.</i>		
<b>Jun 6</b>	<b>4. A 'CLASSICAL' IMPLICIT MEMORY: PAVLOVIAN CONDITIONING</b>		<b>Ch 4</b>
	<i>The Rescorla-Wagner model, the cerebellum and a link to Skill memories</i>		
<b>Jun 15</b>	<b>5. SIMPLE FORMS OF IMPLICIT MEMORY: NON-ASSOCIATIVE</b>		<b>Ch 3</b>
	<i>Habituation, Sensitization and Priming: from sea slugs to the visual cortex</i>		
<b>Jun 17</b>	<b>ESSAY Outline Due</b>		
<b>Jun 22</b>	<b>6. COMPLEX IMPLICIT MEMORIES: SKILLS</b>		<b>Ch 8</b>
	<i>Cognitive and neural outline, Parkinson's disease</i>		
<b>Jun 22</b>	<b>MID-TERM</b>		
<b>UNIT 3 → The Unity of the Mind: How Memory Systems work together</b>			
<b>Jul 4</b>	<b>7. EMOTIONS &amp; MEMORY</b>		<b>Ch 10</b>
	<i>How Emotions impact Memories: Drugs, Amygdala &amp; PTSD</i>		
<b>Jul 13</b>	<b>8. WORKING MEMORY: THE PLAYGROUND OF OUR MEMORIES</b>		<b>Ch 9</b>
	<i>Evolving cognitive models, testing mice and men, frontal lobes and schizophrenia</i>		
<b>Jul 25</b>	<b>9. CONSOLIDATION, RE-CONSOLIDATION &amp; SLEEP</b>		<b>Chs 7, 10</b>
	<i>Memories are not fixed: eye witness errors, pruning, re-scaling, the importance of sleep</i>		
<b>Aug 1</b>	<b>10. AGING &amp; DEVELOPMENT</b>		<b>Ch 12</b>
	<i>Memory in the brain growing up, and then old; social deprivation</i>		
<b>Aug 1</b>	<b>Full ESSAY Due</b>		
<b>Aug 8</b>	<b>11. AMNESIAS &amp; ALZHEIMER'S</b>		<b>Chs 7, 12</b>
	<i>Infantile amnesia and amnesias from neurodegeneration</i>		
<b>Aug 15-19</b>	<b>FINAL EXAM – (TBA)</b>		