



**PSYO 311 - 001**

**Memory**

2021 Term 1

Monday and Wednesday 1700 to 1830, FIPKE 204

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*Welcome to Memory!*

*I am looking forward to getting to know each of you while we explore human memory and select experiments in the field. My aim is to provide an engaging, respectful class environment where each student can practice critical thinking to further their understanding of the provided material.*

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*As a courtesy, before emailing, please check the syllabus and the Canvas announcements and discussions to see if the information you are seeking is already posted.*

*Always include "PSYO 311" in the subject line of your message and your full name ID in the content of your message. We will aim to respond to all email messages within two working days of receipt. If more than three working days have passed without a response, double-check the content of your message as it is possible the information you are seeking is already available in the course materials.*



### **Course Overview, Content, and Objectives**

This course will provide you with fundamentals of human memory and an understanding of select seminal experiments in the field. With respect to experiments, they will be placed on cognitive experiments due to their historic importance for the study of human memory and their applicability to research experience.

The course will explore: Sensory memory, short-term memory, working memory, long term memory, learning/ implicit memory, retrieval, and memory disruptions in eye-witness testimony, false memories, and amnesia. Class time will be divided between lectures and demonstrations of experiments.

Course delivery will occur via a hybrid model, with some lectures delivered asynchronously, and some in-person (that are recorded and posted). All recorded content will be posted for 1 week.

### **Learning Outcomes**

After completing this course, students will be able to:

- Identify and describe main theories of human memory
- Describe and discriminate between types of memory
- Describe different memory phenomena
- Understand seminal (cognitive) experimental designs related to how such phenomena were discovered, and our overall understanding of human memory
- Understand how/when memory disruptions occur
- Gain experience with conference-style poster presentations related to human memory

### **Evaluation Criteria and Grading**

- 1) **Exam #1 (25% of grade).** The exam will cover Chapters 3,4,6,7 of the course, including all lecture and textbook material. The exam will be in multiple-choice and brief written format.
- 2) **Exam #2: (25% of grade).** The exam will cover Chapters 2,5,8,14 of the course, including all lecture and textbook material. The exam will be in multiple-choice and brief written format.
- 3) **Experiment abstract/summary assignment (20%).** This assignment will be due on the last day of class (Dec 8). Students will write an abstract detailing an experiment that builds upon a line of questioning identified in one of the experiments covered in class. The abstract will be written in accordance with nature summary paragraph guidelines, with a **maximum of 350** words [[http://www.cbs.umn.edu/sites/default/files/public/downloads/Annotated\\_Nature\\_abstract.pdf](http://www.cbs.umn.edu/sites/default/files/public/downloads/Annotated_Nature_abstract.pdf)]. Further details related to this assignment will be released mid-November.
- 4) **In class brief assessments (10%).** In class quizzes will be used to test knowledge of that readings. Recognizing that you have many priorities throughout the semester



that may result in missed classes or variable performance, the lowest performance will be dropped. These quizzes will contribute 10% of the course grade.

- 5) **Poster presentations (20%).** Posters will be created and presented in groups of five, on select cognitive memory experiments that are randomly assigned. Teams will be randomly assigned to one of two presentation days, and will present their poster in 4 mins (i.e., 1 min per section: introduction, methods, results, and discussion). The goal of this assignment is to mirror conference-style poster presentations, whereby students will gain an understanding of how to create a scientific poster, and to present this information to a scientific audience (although not necessarily in one's direct field) in a concise manner. Posters and presentations will be marked during the presentation session your group is assigned to. Groups will be randomly assigned after the drop date in September. Recognizing that it is not always easy to coordinate group project time with your extra-curricular commitments, you will be provided with time during one lecture to work on this project well in advance of the due date, and presentations will take place after reading week.
- 6) **SONA/Research activity (2% Bonus).** See below for explanation of how to participate in SONA.

### Course Schedule, Required Readings

*The textbook used alongside this course is Memory, 3<sup>rd</sup> edition by Alan Baddeley, Michael Eysenck, and Michael Anderson. ISBN 9781138326095*

**Note: This schedule is tentative and subject to change. It is your responsibility to attend class, to monitor Canvas, and to be aware of any changes that occur. Links to the supplementary readings for each experiment demonstration can be found on Canvas.**

*Asynchronous lectures are written in red.*

	Topics and/or exam	Required Readings	Quiz
Wed. Sept 8	Course overview and introduction	Syllabus	-
Mon. Sept 13	Sensory and short term memory	Ch 1/3	-
Wed. Sept 15	Short-term memory - exp demo	Ch 3	Q1 Ch 3
Mon. Sept 20	Working memory	Ch 4	-
Wed. Sept 22	Working memory - exp demo -create poster groups if time	Ch 4	Q2 Ch4



Mon. Sept 27	Long term memory -create poster groups	Ch 6	-
Wed. Sept 29	Long term memory II - exp demo	Ch 7	Q3 Ch6
Mon. Oct 4	<b>Exam 1 (Ch 1*,3,4,6,7) *only sensory memory</b>		-
Wed. Oct 6	Retrieval	Ch 8	-
Mon. Oct 11	Thanksgiving	Ch 8	-
Wed. Oct 13	Memory and the brain - neuroimaging demo	Ch 2	Q4 Ch 8
Mon. Oct 18	Learning and memory	Ch 5	-
Wed. Oct 20	Learning and memory – exp demo	Ch 5	Q5 Ch 5
Mon. Oct 25	Memory and aging	Ch 14	-
Wed. Oct 27	TBA		Q6 Ch 14
Mon. Nov 1	Posters		-
Wed. Nov 3	<b>Exam 2 – Ch 8, 2, 5, 14</b>		-
Mon. Nov 8	Reading break		-
Wed. Nov 10	Reading break		-
Mon. Nov 15	Music and memory – <i>guest lecture</i>	TBA	-
Wed. Nov 17	Poster presentation 1		-
Mon. Nov 22	Poster presentation 2		-
Wed. Nov 24	Eyewitness testimony	Ch 12	-
Mon. Nov 29	False memory – exp demo	Ch 12	Q7 Ch 12
Wed. Dec 1	When memory systems fail (amnesia)	Ch 16	-
Mon. Dec 6	Review and conclusions		-
Wed. Dec 8	TBA		-

\*Given that students may be arriving to Kelowna at various times with different self-isolation requirements due to the ongoing pandemic, the first (introduction) lecture will be HELD ONLINE, IN ASYNCHRONOUS FORMAT. This lecture will be made available on Canvas, on Sept 8. Please review this material at a time that is convenient for you, before Monday Sept 13.

### RESEARCH ACTIVITY (2% BONUS)

This course allows for 2% bonus to be added to your final grade. This requirement may be fulfilled either through direct participation in research through the SONA online volunteer subject pool (Option 1), by completing two written summaries of primary research articles (Option 2), or by a combination of the two types of activities.

#### Research Participation (Option 1)

As a participant in one of numerous Psychology Department Subject Pool experiments posted at <http://ubco.sonaonline.com/>, you will obtain 0.5% credit for each 0.5 hour of participation



at UBCO. Hence, participation requiring a 1-hour time commitment provides a credit of 1%, 1.5 hours provides a credit of 1.5%, and 2 hours provides a credit of 2.0%, etc.

### *Important Requirements*

You may participate in more than one experiment in order to accrue credits. A substantial number of studies are typically hosted on SONA; therefore, you will have many different choices. It is important to sign up for experiments early in the semester in order to increase the odds that a time slot is available. If you wait until late in the semester, all time slots may be taken.

### *Logging On To The System*

SONA is only open for those students who are registered in a psychology course offering SONA credit. Please only use the request account option if you have never used the SONA system before. If you have used the SONA system before, please use the most recent login information you remember to log in.

### *Missed Appointments & Penalties*

Missed appointments (i.e., failure to cancel the appointment at least 3 hours prior to the session) will be tracked. The consequence will be that you will not receive credit for participation in the experiment and will lose the credit value of the study from possible marks associated with participation in research.

Please email [psyc.ubco.research@ubc.ca](mailto:psyc.ubco.research@ubc.ca) with any questions or concerns that you may have regarding the SONA system, including unassigned bonus credits. **Your professor does NOT have access to this information.**

### **Research Summary Assignment (Option 2)**

As an alternative to participating in a Psychology Subject Pool experiment, you may obtain subject pool credit by completing 1 library-writing project to a satisfactory level. This library-writing project is worth a total of two credits [i.e., 2% toward the final grade].

### *Important Requirements*

1. This project consists of reading and summarizing (in written form) a recent, peer-reviewed, primary research article.
  - A “recent” article has been published within the past 12 months.
  - A “peer reviewed” article is one that has been reviewed by other scholars before it is accepted – for example, it **cannot** be a news item, an article from a popular magazine, a notice, or a letter to the editor.
  - A “primary” research article describes an experiment or study where data are collected by the authors. In other words, the article you choose to review **cannot** be a book review, literature review, or summary article.
2. You must choose an article published by one of the following journals:
  - *Acta Psychologica*
  - *Brain*
  - *Brain Research*



- *Behavioural Brain Research*
- *Behavioural Neuroscience*
- *Canadian Journal of Behavioural Science*
- *Canadian Journal of Experimental Psychology*
- *Cerebral Cortex*
- *Cognitive, Affective, & Behavioral Neuroscience*
- *Cortex*
- *Current Directions in Psychological Science*
- *Experimental Brain Research*
- *Human Brain Mapping*
- *Journal of Experimental Psychology (and any of its sub-journals, such as Human Perception and Performance)*
- *Journal of Cognitive Neuroscience*
- *Learning & Behavior*
- *Memory & Cognition*
- *Nature (or any nature sub-journal, such as Nature Human Behaviour, Scientific Reports)*
- *Neuroimage*
- *Psychological Science*
- *Perception & Psychophysics*
- *Psychonomic Bulletin & Review*

***Should you wish to choose an article in a journal not listed here, you are required to seek Dr. Kraeutner's approval.***

### 3. Other Assignment Guidelines

The summary should be about 300-500 words in length. The source must be cited and referenced in accordance with the *Publication Manual of the American Psychological Association* (6<sup>th</sup> ed.). The review will be graded on a pass – fail basis (2% or 0%). At least **14 days before the end of classes** each term, submit the following to the course instructor:

- the article summary
- a copy of the article
- a cover page that specifies your name, student number, email address, and word count of the summary.
- the course title and number

Submitting the assignment 14 days in advance is necessary to ensure that you have an opportunity to make corrections, if required. If you do not check your email frequently, provide a phone number on the cover page.

### **UBC Okanagan Disability Resource Centre:**

The Disability Resource Centre ensures educational equity for students with disabilities and chronic medical conditions. If you are disabled, have an injury or illness and require academic



accommodations to meet the course objectives, please contact Earllene Roberts, the Diversity Advisor for the Disability Resource Centre located in the University Centre building (UNC 214). UNC 214 250.807.9263

Email [earllene.roberts@ubc.ca](mailto:earllene.roberts@ubc.ca)

Web: [www.students.ok.ubc.ca/drc](http://www.students.ok.ubc.ca/drc)