## COURSE SYLLABUS FOR SEPTEMBER 2023: INSTRUCTOR DR. CATHARINE RANKIN

#### **ACKNOWLEDGEMENT**

UBC's Point Grey Campus is located on the traditional, ancestral, and unceded territory of the xwmə0kwəyəm (Musqueam) people. The land it is situated on has always been a place of learning for the Musqueam people, who for millennia have passed on their culture, history, and traditions from one generation to the next on this site.

## **COVID-19 PANDEMIC AWARENESS**

While we will be conducting lectures in person, it is important to acknowledge that the COVID-19 pandemic is not over. As a class, we have a duty of care to protect each other, our families, and communities. If you are sick, or are exposed to someone who has tested positive for COVID-19, it is important that you stay home, or wear a mask in class/public. As your instructor, I assure you that I will do the same. This class has been designed to provide flexibility so that you can prioritize your health and still succeed in this course.

## **COURSE DESCRIPTION**

This is a one-term course on the basic principles of learning and the neural mechanisms underlying simple forms of learning. We will be covering the topic learning in a variety of ways: theoretical analyses, experimental research using animals, experimental research using humans, applications of research to daily problems, behavioral approaches, cognitive approaches and physiological approaches. The material to be learned will come from the assigned text, from lecture notes, from readings posted on connect and from my lectures. Some material will be redundant, some will not! There will be some information that is covered in lectures that is not in the text, and vice versa. You are responsible for all material.

## BASIC COURSE INFORMATION

The classroom is Chemistry D200 at 2036 Main Mall. Classes are scheduled in person for Mondays, Wednesdays and Fridays at 2pm-3pm.

Course Title	Course Code Number	Credit Value
Neuroscience of simple learning	PSYC 363	3

# **PREREQUISITES**

One of BIOL 260, BIOL 361, BIOL 455, BIOL 458, CAPS 301, PSYC 260, PSYC 263, PSYC 270, PSYC 304.

# **CONTACTS**

Course Instructor	Contact Details	Office Hours
Catharine Rankin	crankin@psych.ubc.ca	By appointment over Zoom

#### OTHER INSTRUCTIONAL STAFF & CONTACTING US

The TA for this course is Nikolas Kokan (<a href="nkokan@student.ubc.ca">nkokan@student.ubc.ca</a>). Nikolas is a PhD student in Neuroscience, supervised by Dr Rankin. His graduate research is investigating how the time between stimuli affects habituation in *C. elegans*. Nikolas will be holding online office hours over Zoom this term, his hours will be posted on Canvas.

You may contact the TA or the Instructor in office hours or by email. In correspondence, please feel free to refer to me as 'Dr Rankin' or 'Professor Rankin'. Please be judicious in your use of email: if you have more than 2 questions, your best option is to attend office hours. Additionally, please remember that we may not be able to respond to emails immediately, especially when received outside of normal workday hours.

Note: if you need to send me a direct message, including any urgent correspondence about personal matters, I would ask you to not use the message function within Canvas, as I can only reply to those direct messages from within the Canvas platform. I will reply to your message faster if you send me a direct email to crankin@psych.ubc.ca.

## **COURSE STRUCTURE**

While PSYC 363 has been designated an in-person class, I am aware that some students are experiencing travel difficulties returning to campus for the start of term, and for all students, the guidance around COVID self-assessment and stay-at-home requirements may make it challenging to attend in-person class. Please let the instructor and the TA know if you have any difficulties attending class.

This is the winter term and it is possible that there will be snowy days that make it difficult to get to campus. Dr. Rankin lives on a hill and it is almost impossible for her to get out if there is snow. In such an event an email will be sent with a Zoom link and the class will take place over zoom.

# DIVERSITY, EQUITY AND INCLUSION

As your instructor, I will work to create a learning environment that welcomes, listens to, and respects students of all identities, inclusive of race, gender, sexuality, age, or ability. If you feel that any class content is inappropriate or makes you feel uncomfortable, I would encourage you to talk to me or the TA. If you feel that your performance in this class is being impacted by circumstances from outside of class, please talk to me or the TA. **Be proactive!** 

## LEARNING MATERIALS

Domjan: The Principles of Learning and Behavior, 7th Edition. Thomson Publishing Company.

Sniffy, the Virtual Rat (e-version) by Alloway, Wilson, Graham and Kramer, Wadsworth Publishing - available online from PC and Mac App stores

In addition, my lecture notes will be available for downloading from the class Canvas website. These notes are copies of what I will be going over in class- having the notes will allow you to listen and to

think about the material as it is presented rather than concentrating on taking notes. In addition, I will often expand on the notes and clarify some of the material.

#### Canvas:

All other course materials (eg articles, extra slides and readings) will be available via Canvas <a href="www.canvas.ubc.ca">www.canvas.ubc.ca</a>. Class notes will be uploaded to Canvas (Modules), no later than the morning of class. You will use Canvas to take your weekly quizzes and also to submit your term papers (see below). I will use Canvas to post regular updates, and students are responsible for checking Canvas regularly for class announcements.

#### LEARNING OBJECTIVES

- 1) An understanding of the history and properties of the simplest forms of learning.
- 2) An understanding of the research on the biological mechanisms of simple forms of learning and memory.
- 3) A survey of the theoretical approachs to explain what is learned in simple forms of learning.
- 4) An understanding of the application of the findings from animals to the behaviour of humans.
- 5) An ability to determine what information is important about a given subject.
- 6) An ability to read instructions and understand what is being asked of you and producing the correct outcome.
- 7) An ability to integrate information to defend a position or explain a concept.

## ASSESSMENTS OF LEARNING

#### **Overall Course Grade:**

• Weekly Quizzes 60%

Short Quizzes 40%Long Quizzes 20%

• Term Paper 1 & 2 40%

# Quizzes:

There will be a weekly quiz that will be in the form of either a Short Quiz or a Long Quiz. A Short Quiz will take 10 minutes total, where you will choose two out of three terms to define and explain the significance of. For the Short Quizzes, each students' two lowest answer scores (that is the two lowest question scores across any Short Quiz, not the lowest overall Short Quiz grade total) will be omitted. The Long Quiz will take 20 minutes and is more of a long answer response to one out of two given questions.

# **Term Papers:**

There will be two Term Papers or Sniffy Papers that will be written throught this course. Together, they will be worth 40% of your overall grade. You will be performing experiments with Sniffy

the Virtual Rat and then writing APA style research papers detailing your experiments. Further along in the term we will providing you with more detailed information on these projects.

#### Missed Quiz or Deadline:

Under <u>UBC's academic concession policy</u>, students may seek academic concession for any of three reasons: conflicting responsibilities; medical circumstances; and compassionate grounds. **If you are feeling ill on the day of a Quiz or the Written Assignment deadline**, please submit a <u>Student Self-Declaration</u> to the instructor so that your in-term concession case can be evaluated (note, please do not send medical documentation). The Instructor will decide whether it is possible to offer a make-up test, or whether to exempt that mark from the overall grade calculation (for short quizzes only-long quizzes must be written and papers must be turned in).

If this is not the first time you have requested concession within the course, fill out Arts Academic Advising's <u>online academic concession form</u> immediately, so that an advisor can evaluate your concession case. If you are a student in a different Faculty, please consult <u>your Faculty's webpage on academic concession</u>, and then contact me where appropriate.

# Course grading:

In order to reduce grade inflation and maintain equity across multiple course sections, all psychology classes are required to comply with departmental norms regarding grade distributions: the average grade in 300-level Psychology class will be 70 for an exceptionally strong class, 68 for an average class, and 67 for a weak class, with a standard deviation of 13. Scaling may be used in order to comply with these norms; grades may be scaled up or down as necessary by an instructor or the department. Grades are not official until they appear on a student's academic record. You will receive both a percent and a letter grade for this course. At UBC, they convert according to the key below:

A+	90-100%	C+	64-67%
Α	85-89%	С	60-63%
A-	80-84%	C-	55-59%
B+	76-79%	D	50-54%
В	72-75%	F	0-49%
B-	68-71%		

## LEARNING RESOURCES

The Department of Psychology teaching office is situated in the main Kenny building on West Mall, and offers appointments during office hours.

#### **COURSE SCHEDULE**

These dates are approximations, if changes occur to this course schedule, students will be informed via Canvas Announcements. Always confirm what the class has covered prior to any tests.

Date	Topic	Readings	Quiz
Sept 6 <sup>th</sup> , 8 <sup>th</sup>	Introduction and Brief History	Ch. 1, 2	Sample Quiz
	Non-Associative Learning		
Sept. 11 <sup>th</sup> , 13 <sup>th</sup> , 15 <sup>th</sup>	Non-Associative Learning	Ch. 2	Sept. 15 <sup>th</sup> , S1
Sept. 18 <sup>th</sup> 20 <sup>th</sup> 22 <sup>nd</sup>	Foundations of Classical Conditioning	Ch. 3, 4	Sept. 22 <sup>nd</sup> , S2
Sept. 25 <sup>th</sup> 27 <sup>th</sup> 29 <sup>th</sup>	Foundations of Classical Conditioning	Ch. 3, 4	Sept. 29 <sup>th</sup> , S3
Oct. 4 <sup>th</sup> , 6 <sup>th</sup>	Foundations of Classical Conditioning	Ch. 3, 4	Oct. 6 <sup>th</sup> , L1
Oct. 11 <sup>th</sup> , 12 <sup>th</sup> , 13 <sup>th</sup>	Principles and Applications of Classical Conditioning	Ch. 3, 4	Oct. 13 <sup>th</sup> , \$4
(includes Makeup	Theories of Classical Conditioning		
Monday on Thursday!)		Sniffy Manual	
Oct. 16 <sup>th</sup> , 18 <sup>th</sup> , 20 <sup>th</sup>	Theories of Classical Conditioning	Ch. 3, 4	Oct. 20 <sup>th</sup> , \$5
	Introduction to Sniffy (Oct. 20 <sup>th</sup> )		
Oct. 23 <sup>rd</sup> , 25 <sup>th</sup> , 27 <sup>th</sup>	Theories of Classical Conditioning	Ch. 3, 4	Oct. 27 <sup>th</sup> , \$6
Oct. 30 <sup>th</sup> , Nov. 1 <sup>st</sup> , 3 <sup>rd</sup>	Reinforcement	Ch. 5, 6	Nov. 3 <sup>rd</sup> , L2
Nov. 6 <sup>th</sup> , 8 <sup>th</sup> , 10 <sup>th</sup>	Reinforcement	Ch. 5, 6	Nov. 10 <sup>th</sup> , \$7
	Stimulus Control and Applications of Reinforcement	Ch. 8	
	Term Paper Due Nov. <b>10</b> <sup>th</sup> (20% of grade)		
Nov. 17 <sup>th</sup>	Stimulus Control and Applications of Reinforcement	Ch. 8	Nov. 17 <sup>th</sup> , 58
Nov. 20 <sup>th</sup> , 22 <sup>nd</sup> , 24 <sup>th</sup>	Stimulus Control and Applications of Reinforcement	Ch. 8	Nov 24 <sup>th</sup> , S9
Nov. 27 <sup>th</sup> , 29 <sup>th</sup> , Dec. 1 <sup>st</sup>	Punishment	Ch. 10	Dec. 1 <sup>st</sup> , L3
Dec. 4 <sup>th</sup> , 6 <sup>th</sup>	Cutting Edge Studies of Learning and Memory		Dec. 6 <sup>th</sup> , <b>S10</b>
Dec. 13 <sup>th</sup>	Term Paper Two Due Dec. 13 <sup>th</sup> (20% of grade)		

# Quizzes

"S" – short answer, 10 min long, choose 2 out of 3 questions to answer, 5 points per question

"L" – essay, 20 min long, choose 1 out of 2 questions to answer, 20 points per question

(for short answer quizzes will omit the bottom 2 answers: NOTE: Answers, not Quizzes!!)

## 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.

#### OTHER COURSE POLICIES

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. Within Canvas, your activity is captured and Instructors are able to detect many instances of cheating from Canvas activity. It is important to remember that all quizzes must be done without the aid of any external assistance, including written notes or texts, websites, electronic sources including, but not limited to, cutting and pasting information and utilizing AI websites. The Department subscribes to TurnItIn, a service designed to detect plagiarism. If a student has any questions as to whether or not their work is even a borderline case of plagiarism or academic misconduct, they are advised to consult the Instructor. Plagiarism online resources: <a href="https://www.bowdoin.edu/dean-of-students/judicial-board/academic-honesty-and-plagiarism/common-types-of-plagiarism.html">https://www.grammarly.com/plagiarism-checker?q=plagiarism&utm\_source=google&utm\_medium=cpc&utm\_campaign=10520838673&utm\_content=447760992950&utm\_term=free%20originality%20checker&matchtype=b&placement=&network=g&gclid=CjwKCAjwj8eJBhA5EiwAg3z0m3LW-vhrxrsxSI2kpQ-J1feB7UIVOCwk4fM3FjupoG\_Z7OD\_0ZEbHRoCOj4QAvD\_BwE&gclsrc=aw.ds

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 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.

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All materials of this course (course handouts, lecture slides, assessments, course readings, etc.) are the intellectual property of the Course Instructor, for use in this course by students currently enrolled in PSYC 363. **DO NOT share materials provided for you to use in this course.** We are working hard to provide all the materials you need to succeed in this course. In return, please respect our work. It is *unacceptable* to share any of these materials beyond our course, including by posting on file-sharing websites (e.g., CourseHero, Google Drive). It is *unacceptable* to share or to copy and paste sentences from course materials (e.g., definitions, questions, long answeres) into any online websites or for profit software for use in studying. Respect the Teaching Team and the intellectual property of the authors of the set readings, and follow copyright law.