

## Course Description

Modern psychology uses the tools of science to investigate behaviour. By successfully completing this course, you will be able to critically understand and contribute to these scientific investigations. Together, we will explore the foundations of the scientific method, the core experimental and non-experimental research designs psychologists most often use to test their hypotheses, and current issues in our science. You will be able to apply your knowledge to collaboratively design your own research study, collect and briefly analyze data, and present your results in written and poster forms. You will be prepared to critically consume psychological claims made in the media, to engage effectively in future courses in psychology, and to pursue further research experience in the social sciences.

## Learning Objectives

Upon successful completion of this course, students will be able to:

1. define and use key concepts (e.g., reliability, validities, operational definition) central to research methods commonly used in psychology
2. question claims about psychological phenomena by critiquing the quality of evidence provided
3. compare experimental and correlational research designs in terms of features, strengths, limitations, variations, analysis strategy, interpretation
4. contribute effectively in a team to design and conduct a basic experiment with human participants to address a psychological question
5. analyze quantitative data using basic descriptive statistics and report those results in scholarly formats common in psychology
6. know and follow ethical guidelines in all aspects of scholarly work (e.g., literature search, design, data collection, analysis, interpretation, reporting)
7. find, interpret, summarize, and appropriately use published quantitative research to understand a psychological phenomenon
8. recognize the norms, values, strengths and limitations of quantitative psychology, as evident in how we ask questions, design research, report results, and approach replication
9. situate quantitative ways of making knowledge in the landscape of academic disciplines broadly, as well as how they may contribute to your personal and professional development.

## Land Acknowledgement

Our course is provided by UBC Point Grey (Vancouver), which sits on the traditional, ancestral, unceded territory of the x<sup>w</sup>məθk<sup>w</sup>əyəm (Musqueam) First Nation.

The land it is situated on has always been a place of learning for the Musqueam people, who for millennia have passed on in their culture, history, and traditions from one generation to the next on this site.

# Teaching Team



*Kyle Gooderham*

**Office Hours** By Appointment  
**Email** kyle@psych.ubc.ca  
**About** Kyle is a PhD candidate in the Cognitive area. His research focuses on how lifestyle factors, like physical activity, sleep, and dietary habits, impact cognitive function. In his spare time he enjoys cooking, listening to music, and participating in and watching sports.

*Miranda Bahng*

**Office Hours** By Appointment  
**Email** mbahng@psych.ubc.ca  
**About** Miranda is a Master's student in the Social/Personality area. Her research focuses on cultural fit, meaning maintenance, and well-being.



*Carol Li*

**Office Hours** By Appointment  
**Email** lisijiaa@student.ubc.ca  
**About** My name is Carol (Sijia) Li, and I am a first year Master's student in the Quantitative Methods area. I am looking forward to being your TA for this class!



*Oliver Jacobs*

**Office Hours** By Appointment  
**Email** ojacobs@psych.ubc.ca  
**About** Oliver's research interests revolve around emerging technologies and cognition in the real world. He is a contributing editor to Psychology Today's VR Blog and has worked in industry with Maslo AI.



*James Wu*

**Office Hours** By Appointment  
**Email** james.shyantau.wu@ubc.ca  
**About** James is a Master's student in the Institute for Resources, Environment and Sustainability. His main research focus is on interventions to reduce dichotomous thinking in important global issues.



## Course Materials

### Textbook

Cozby, P. C., Mar, R. & Rawn, C. D. (2020). *Methods in Behavioural Research* (3rd Canadian Ed.). Toronto, ON: McGraw-Hill Ryerson.

*I do not recommend that you use any other edition of the textbook as there may be differences in material. You may purchase a physical or digital copy.*

### Canvas

Lecture materials and recordings, assessments, and grades will be available through UBC Canvas.

# Learning Assessments

Learning Assessment	Percent of Total Grade	Due Date
Research Project	45%	
TCPS 2: CORE Certification	1%	23 September
Research Report	25%	2 December
Research Poster	10%	6 December
Participation & Peer Evaluation	5%	7 December
Research Experience	4%	7 December
Mastery Quizzes & Self-Reflection	4%	
	2%	21 October
	2%	7 December
Midterm Exam	18%	27 October
Communicating Psychology	6%	4 November
Final Exam	27%	TBD 11-22 December
<b>Total</b>	<b>100%</b>	

## Learning Appraisal Descriptions

### *Research Project*

The heart of PSYC 217 is the Lab Research Project. You gain experience working in a team to design an experiment, collect data, conduct basic analyses, as well as present your work at a conference-style poster session and a written APA-style report. There are four graded elements to this Project. As you will learn, there is no perfect study, and some of the richest learning can happen from mistakes. Therefore, the grading structure is designed carefully to reward engaging in the research process and applying our course material, regardless of limitations and mistakes in the design and execution of the group's experiment. We measure your ongoing contributions to the group and the research experience, and even greater emphasis on your individual ability to write about research.

You and your team will be guided throughout this process, with a series of "Labs" embedded throughout this course, led by your Teaching Fellows. All instructions, tips, strategies, and deliverables are embedded as Canvas modules, and your TF will be there to support you along the way. Please see Canvas for more information about the Labs.

### **TCPS 2: CORE Certification.**

The Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2) provides ethics guidance that applies to all research involving human participants – including their data and/or biological materials – conducted under the auspices of an institution eligible for funding by the federal Agencies (CIHR, NSERC, SSHRC).

The online tutorial CORE-2022 (Course on Research Ethics) is an introduction to the TCPS 2 for the research community. It focuses on the TCPS 2 ethics guidance that is applicable to all research involving human participants, regardless of discipline or methodology.

You must complete the TCPS2: CORE Certification to participate in the Research Project. Failure to submit certification will result in a grade of zero (0) for the Research Report and Research Poster assignments.

### **Research Report.**

The most important step in the research communication process for researchers is to clearly document their research and the contribution it makes to understanding human behaviour in a written manuscript. These written manuscripts are then reviewed by their peers, and (hopefully!) published in a journal. This individual report is designed to give you experience with a part of this process. Your report must be written using APA style and must include the following sections: Abstract, Introduction, Method, Results (including at least one graph), Discussion and References (at least 2). See Appendix A of your textbook and resources available on Canvas for more guidance in writing APA style reports, including a detailed grading rubric to help guide your work.

Reports must be 5-7 double spaced 8.5 x 11 inch pages (approximately 1500-1700 words). This page limit does NOT include a cover page, references, graphs, tables, or appendices (if needed, which they usually are not). You must use 12 point Arial, Times New Roman, or Calibri font and margins must be set to 1 inch all around. Your paper should integrate into the introduction section at least 2 references to related empirical journal articles (e.g., to set up a foundation for your hypothesis). Articles can also be used in the discussion section to help put results into context. Submit your report in two places: on Canvas, as well as on Turnitin (details to come).

### **Research Poster.**

You will prepare, as a group, a poster that summarizes your research project's hypothesis, method, results, and conclusions. During the poster session, you will be asked to evaluate your peers' posters (from a different section). Your poster grade will be a combination of your Teaching Fellow's rating and the average of five peers' ratings. More details about how to prepare for the poster and presentation, as well as how to evaluate others' posters will be provided later in the term.

### **Participation & Peer Evaluation.**

Participation and collaboration are essential for this course. A peer evaluation serves to hold each other accountable and to recognize the work of your peers. More information about the Participation & Peer Evaluation graded component will be provided.

### **Research Experience (HSP credits/Library Assignments).**

The REC is designed to help you learn more about psychology and how research is conducted, and to provide you with first-hand experience with psychological research. This experience may make understanding research easier (Ceynar Rosell et al., 2006) and may help you decide whether research is a reasonable career option for you. You may earn credit for this assignment by participating in the Human Subject Pool or by completing an alternative set of Library Assignments.

You may earn up to four (4) percentage points on your overall final grade by participating in studies regularly conducted by the Psychology Department and coordinated through the human subject pool (HSP). This provides the valuable opportunity to observe the research process directly and to contribute to the ongoing research activities at UBC. The extra grades are obtained by signing up for the Introductory Psychology Subject Pool through their website: <https://ubc-psych.sona-systems.com>. Please note that any inquiries about credits should be directed to HSP or the experimenters that you worked with, not the instructor. One percentage point is assigned to your final grade for each hour of participation. Credits can be recorded and tracked via the subject credit website. If you do not correctly assign your credits to this course, you will NOT receive credit so please make sure you have done this correctly.

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. For each summary, you must select a research article (not a letter to the editor, commentary, or review paper) published between 2000 and the present in the journal *Psychological Science*. Each summary should be about 500 words and should describe the research question, methods, and results of the study presented in the article. Complete instructions on how to complete the library-writing projects can be found on p.4 ("The Library

Option”) of the guide at <https://psych.ubc.ca/undergraduate/opportunities/human-subject-pool/> in the document entitled “Subject Pool Information for Participants.” You must adhere to the complete instructions detailed in the guide to receive your credits.

Any student who is suspected of plagiarism will, at a minimum, not be granted credit, and their course instructor will be notified. Further action may be taken at a departmental or university level.

*The HSP system closes on the last day of classes. This will be your final day to earn research participation credits, and the final day to assign credits to this course.*

### ***Mastery Quizzes & Self-Reflection***

Mastery quizzes are designed to help you identify strengths and areas for improvement in preparation for course exams. These take the form of multiple-choice chapter quizzes designed to examine critical course content.

You will also complete two self-reflection surveys about your learning goals and achievement throughout the semester. These metacognitive exercises are designed to help you plan for success, monitor your progress, and identify strategies to help you attain your stated goals. Additionally, these provide me the opportunity to be responsive to your learning needs by modifying lesson plans or curriculum, identifying students who request additional learning support, and supporting the diverse needs of learners.

### ***Communicating Psychology***

This short, written assignment offers you experience finding a pre-approved empirical journal article using the university’s library system, identifying the major features of a study design, and communicating the most important findings in a compelling way. This assignment provides useful experience for your final paper, helps you develop skills communicating about psychological research, and is relevant wherever you take your psychology degree. Rather than taking the form of a single essay, I offer about a dozen specific open-ended questions for you to respond to using Canvas Quizzes. Please see the Communicating Psychology Assignment Guidelines page on Canvas for details.

### ***Exams***

Exams will emphasize conceptual understanding, integration, and application of course concepts. Questions will draw on both lectures and the readings and, for superior performance, you must have a clear understanding of both these sources of course content.

The midterm exam will consist of multiple-choice and short answer questions which will assess your knowledge of all course material covered to that point.

The final exam will consist of multiple-choice and short answer questions which will assess your knowledge of all course material.

## **University & Departmental 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, spiritual and cultural 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 [here](#).

Details of Campus-wide Policies and Regulations are available at:  
<https://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,0,0,0>.

### **Access and Diversity**

UBC is committed to providing Accommodation to promote human rights, equity and diversity, and to comply with its duty under the British Columbia *Human Rights Code* to make its services and facilities available in a manner that does not discriminate. Students will be Accommodated in a way that respects their dignity, privacy and autonomy.

UBC is committed to equal opportunity in education for all students including those with documented physical or learning disabilities. If you have a disability that affects your learning or performance in class, including exam writing, please visit <https://students.ubc.ca/about-student-services/centre-for-accessibility>. UBC provides appropriate accommodation for students for religious and cultural observances.

### **Conduct**

The University of British Columbia envisions a climate in which students, faculty and staff are provided with the best possible conditions for learning, researching, and working, including an environment that is dedicated to excellence, equity, and mutual respect. The University of British Columbia strives to realize this vision by establishing employment and educational practices that respect the dignity of individuals and make it possible for everyone to live, work and study in a positive and supportive environment, free from harmful behaviours such as bullying and harassment. Please make sure that you're familiar with the University's Respectful Environment policy at: <https://hr.ubc.ca/working-ubc/respectful-environment>.

University courses should be conducive to learning and rigorous intellectual inquiry within a context in which everyone feels included and respected—regardless of race, ethnicity, gender identity, gender expression, sexual orientation, political or religious affiliations, ability, age, social status, etc. All students in this class are encouraged to express themselves thoughtfully when discussing course material; and, when you do express yourself, it's important that you do so in a manner that shows respect for every other member of this class.

You can find additional information about resources pertaining to equity, diversity, and inclusion on the Psychology Department's website: <https://psych.ubc.ca/about/equity-inclusion/>.

All interactions must be done with respect and courtesy. There is a zero-tolerance policy for bullying or harassment and failure to comply will result in disciplinary action.

### **Academic Integrity**

Cheating on exams will result in a score of 0 for that exam. Assignments must be completed independently. Sharing your answers to assignment questions or using another student's work is considered cheating and will result in a score of 0 for that assignment. All forms of cheating will be reported to the university for appropriate action. Failure to comply with the Academic Conduct policy will result in sanctions and disciplinary measures.

### ***Psychology Department's Position on Academic Integrity***

Cheating, plagiarism, and other forms of academic misconduct are serious concerns of the University, and the Department of Psychology has taken steps to alleviate them. First, the Department uses software that can reliably detect cheating on multiple-choice exams by analyzing the patterns of students' responses. In addition, the Department subscribes to *Turnitin*, a service designed to detect and deter plagiarism. All materials (e.g., papers, lab assignments) that students submit for grading may be scanned and compared to over five billion pages of content located on the Internet or in *Turnitin*'s own proprietary databases. The results of these

comparisons are compiled into customized "Originality Reports" containing several, sensitive measures of plagiarism; instructors receive copies of these reports for students in their class.

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.

If you have any questions as to whether or not what you are doing is even a borderline case of academic misconduct, please consult me.

Details on the University's Discipline for Academic Misconduct policy is available at:

<https://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,54,111,0>.

### **Withdrawals**

Withdrawal from this course without record of the course on your transcript must occur before 19 September 2022 or before 28 October 2022 for withdrawal with a standing of "W" on your transcript.

### **Health and Wellbeing**

UBC is committed to advancing the mental health and wellbeing of its students. If you, or someone you know is feeling overwhelmed, depressed and/or in need of support, services are available. Please visit <https://students.ubc.ca/health/counselling-services> for more information.

*Please contact me immediately for any health or wellbeing concerns.*

### **COVID-19**

We will follow the advice of the Campus Return Plan. Further information will be provided about the delivery of the course in accordance with the appropriate University and Provincial orders.

## **Course Policies**

### **Course Structure**

Lectures will be delivered in person during regularly scheduled class. The lectures will be recorded and made available so that they can be viewed later. *If you are feeling unwell, please do not attend class.*

### **Classroom Conduct**

Any behaviour that is not conducive to effective learning and a positive classroom environment will not be tolerated. Some classroom behaviours, including distracting audio or visual stimuli (eg. texting, using social media), are particularly detrimental. Disruption or conduct detrimental to the class may result in you being removed from the classroom.

### **Email**

I check my email regularly during business hours and you may anticipate a reply within two business days of your email. When emailing, please include "PSYC 217 990" as well as your full name and student number in the subject line.

### **Assessments**

#### ***Obtaining Concession***

If you are unable to complete an assessment on or by the assigned date you will need to apply for academic concession. For course policies regarding in-term academic concessions, please refer to the relevant [UBC calendar entry](#). Faculty of Arts-specific information is [here](#). For your first request for concession, please fill out the [self-declaration form](#) and notify me. If you are making additional requests for concession, please contact [Arts Academic Advising](#) and notify me.

### ***Missed Assessments***

You are expected to write all exams and complete all assessments by the specified dates. If you miss an assessment for a valid reason, you must contact the instructor *before the assessment* or as soon as possible after the assessment's due date. Students who miss an assessment will receive a score of 0. If you miss an assessment due to unforeseen yet serious circumstances, it is your responsibility to provide suitable documentation no later than two days after the assessment was originally scheduled to verify your absence.

***Please contact me immediately if you are unable to complete an assessment on time.*** In all cases, the earlier you can provide your request for accommodation, the greater the likelihood that accommodation can be arranged.

### ***Late Assessments***

In the absence of concession there is a 10% penalty per day for lateness for assessment and the assessment will not be accepted if it is more than one week late.

### **Examinations**

Makeup exams are subject to instructor approval and can only be taken within **one-week** of the original exam date (unless your circumstance warrants a longer period). If you miss an exam for any other reason (e.g., sleeping in, forgetting there was an exam, etc.), you will receive a 0 on the exam.

### ***Reviewing Examinations***

You may review your midterm exam after the exam marks are released by requesting to see it during TA office hours. Your TA will be available to answer any questions or concerns regarding your exams. Should you be unable to attend TA office hours, you may arrange a separate appointment to see your exam **within two-weeks** of the grades being released. Following this two-week period, your exam will not be available.

### **Grades**

All psychology courses are required to comply with departmental norms regarding grade distributions, in order to reduce grade inflation and maintain equity across multiple course sections. The average grade in 100- and 200-level Psychology classes may range from 68 for a weak class, to 70 for an average class, and 72 for an exceptionally strong class, with a standard deviation of 14. The corresponding figures for 300- and 400-level classes will be 71, 73, and 75, 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 the professor or department. Grades are not official until they appear on a student's academic record.

<b>Letter Grade</b>	<b>Percent</b>	<b>Letter Grade</b>	<b>Percent</b>
A+	90 - 100	C+	64-67
A	85 - 89	C	60-63
A-	80 - 84	C-	55-59
B+	76 - 79	D	50-54
B	72 - 75	F	0-49
B-	68 - 71		

### **Disputing a Grade**



Any dispute about a graded item should be made in writing to the instructor and should detail the point of contention. All disputes must be made within **two-weeks** of receiving your grade. After two-weeks, we will not accept disputes.

### **Copyright and Intellectual Property**

All readings for this course are copyrighted and cannot be redistributed without permission of the copyright owner. Lecture videos and other course materials are the intellectual property of the instructor(s) and cannot be redistributed (e.g., posted on any other website, or shared in any other way) without the permission of the instructor. Violation of these policies may lead to academic discipline.

## **Additional Resources**

Additional resources may also be helpful as you contend with the challenges of taking university courses during a pandemic, and dealing with life's challenges more broadly.

- Guidance for online classes: <https://keeplearning.ubc.ca/>
- Assistance with working remotely: <https://it.ubc.ca/ubc-it-guide-working-campus>
- Guidance on useful skills for students: <https://learningcommons.ubc.ca/student-toolkits/>
- Student's guide to Canvas: <https://students.canvas.ubc.ca/>
- COVID-19 health guidance: <https://covid19.ubc.ca/health-guidance/>
- Mental health support: <https://students.ubc.ca/health/mental-health-during-covid-19>
- Counselling Services: <https://students.ubc.ca/health/counselling-services>
- Wellness Centre: <http://students.ubc.ca/livewell/services/wellness-centre>
- Student Health Services: <http://students.ubc.ca/livewell/services/student-health-service>

# Course Schedule

Week	Date	Delivery	Topic	Reading
1	08-Sep	O/S	Introduction	Syllabus
2	15-Sep		Scientific Understanding of Behaviour	CH. 1
	15-Sep		Where to Start	CH. 2
3	22-Sep		Research Design Fundamentals	CH. 4
	22-Sep		Research Design Fundamentals	CH. 4
4	29-Sep	O/S	Measurement	CH. 5
	29-Sep	O/S	Lab 1	
5	06-Oct		Survey Research: Asking People about Themselves	CH. 7
	06-Oct		Survey Research: Asking People about Themselves	CH. 7
6	13-Oct	O/S	Experimental Design	CH. 8
	13-Oct	O/S	Lab 2	
7	20-Oct		Conducting Studies	CH. 9
	20-Oct		Ethical Research	CH. 3
8	27-Oct		<b>Exam</b>	
	27-Oct		Lab 3	
9	03-Nov	O/S	Descriptive Statistics	CH. 12
	03-Nov	O/S	Lab 4	
10	10-Nov		Closed. Midterm Break.	CH. 12
11	17-Nov	O/S	Descriptive Statistics	CH. 12
	17-Nov	O/S	Lab 5	
12	24-Nov		Observational Methods	CH. 6
	24-Nov		Research Designs for Special Circumstances	CH. 10
13	01-Dec		Complex Experimental Designs	CH. 11
	01-Dec		Generalizing Results	CH. 14

*Note.* The course schedule is subject to change as the term progresses. Updates will be announced in class.

*The Final Exam will take place during the final exam period, including Saturdays. Your attendance at the final exam is mandatory.*

*You should not make travel plans until you learn the date of your final exam. You cannot take the final at a different date/time unless you have a verifiable medical reason.*