

PSYC 217 009

Research Methods

Fridays
11:00am-2:00pm
Buchanan A203

Instructor



Dr. Grace Truong

Office location: Kenny 3104

Email: gracet@psych.ubc.ca

F2F drop-in hours: Wed, 2:30-3:30pm

Zoom office hours: Fri, 3:00-4:00pm

Teaching Fellows (TFs)

TFs are here to help you learn and to help me to evaluate your learning. They will facilitate lab sections, grade papers and exams, hold office hours for you, and respond to brief questions sent via email. If you cannot make their scheduled office hours, email them to work out an alternative appointment.

Joey Manaligod

Email: mmanaligod@psych.ubc.ca

Office Hour: Tuesdays, 12:30pm-1:30pm

Office Location: Zoom (see Canvas for link)

Lab Groups: 901-904

Joseph Liang

Email: joseph.liang@psych.ubc.ca

Office Hour: Fridays, 5:00pm-6:00pm

Office Location: Zoom (see Canvas for link)

Lab Groups: 905-908

Khai Qing Chua

Email: kqchua@student.ubc.ca

Office Hour: Wednesdays, 11:30am-12:30pm

Office Location: Kenny 4005

Lab Groups: 909-912

Nikolas Kokan

Email: nkokan@student.ubc.ca

Office Hour: Tuesdays, 11:30am-12:30pm

Office Location: Zoom (see Canvas for link)

Lab Groups: 913-916

Course Description

The purpose of this course is to help you develop the skills to be a critical thinker – both as a consumer of research, and a contributor to research. We will equip you with the knowledge and tools to **critically evaluate** research and **ask** the appropriate questions, **create** new ideas and **design** ways to test your ideas, **analyze** your data, and **communicate** your results to others. To facilitate this process, lab sessions are integrated into the course where you will work with your team to apply what you have learned in the classroom to a research project.

Acknowledgements

UBC Vancouver's Point Grey Campus is situated on the traditional, ancestral, and unceded territory of the [Musqueam people](#). We pay respect to the traditional guardians of this land and we acknowledge their longstanding relationship with this territory. We acknowledge the traditional knowledge keepers, both young and old. We honour their courageous leaders: past, present, and future.

Language regarding the lab portion of this course was adapted from Catherine Rawn.

Your Learning Goals

When the course ends, students successfully meeting the course requirements will be able to:

- Identify and explain sound scientific principles and practices in research
- Think critically about everyday pseudoscientific claims
- Create and implement research designs based on scientific principles and practices
- Perform simple forms of data analyses
- Communicate your research findings to a community of your peers
- Write papers in proper APA format
- Use the school's library resources to locate empirical journal articles
- Understand and critically analyze information conveyed in psychology journal articles

PSYC 217 and the Psychology program: PSYC 217 requires both PSYC 101 and PSYC 102. PSYC 217 is a prerequisite for PSYC 218 (Analysis of Behavioural Data) and PSYC 359 (Advanced Behavioural Statistics), and is a program requirement for a B.A. in Psychology.

Withdrawals: Withdrawal from this course without record of the course on your transcript must occur before Sept 16 2024, or before Oct 25 2024 for withdrawal with a standing of "W" on your transcript.

Course Materials

Textbooks

Cozby, P. C., Mar, R. A., & Rawn, C. D. (2020). *Methods in behavioural research (Third Canadian Ed.)*. Toronto, ON: McGraw-Hill Ryerson. Either the hard version or the digital version of the textbook is sufficient. The digital version of the textbook contains optional activities that you may find useful for studying.



Connect is the *OPTIONAL* online supplemental resource for the textbook:

Connect URL: <https://connect.mheducation.com/class/g-truong-217-009-fall-2024>

Non-textbook readings

Certain topics will require material not found in the textbook. Readings for these topics will either be posted on Canvas or be available through the UBC Library.

Course Website

Lecture slides, assignments, and grades will be available through Canvas. Lecture slides will be posted after class. You are also welcome to use the Canvas course page to contact other students (e.g., arrange to share notes for missed classes, clarify a difficult topic, etc.) via Piazza.

Financial Hardship

If you are experiencing serious financial hardship and are unable to purchase some or all of the required materials, please come see me (the instructor) and I'll do my best to set you up with what you need.

Learning Appraisals at a Glance

Learning Appraisal Activity	Due Date	Total Grade (no OTE)	Total Grade (with OTE)
Midterm 1	Oct 11	14%	11%
Midterm 2	Nov 8	14%	11%
Lab Research Project <ul style="list-style-type: none"> ➤ Individual report, 20% ➤ Team poster presentation, 10% ➤ Lab Engagement Activities, 5% 	Individual report due Nov 24 @ 11:59pm Poster – Dec 4	35%	35%
Lab Peer Evaluations, 1% each	Oct 20 Dec 8	2%	2%
Research Experience <ul style="list-style-type: none"> ➤ Participation in studies, 4% ➤ TCPS completion, 1% 	Participation in studies occurs throughout term TCPS – Sept 22	5%	5%
<i>Optional Topic Exploration (OTE)</i>			
Preliminary draft/notes, 2%	Oct 25	0%	10%
Final submission, 8%	Dec 10		
Top Hat Participation	Throughout term	4%	4%
Final Exam	TBD	26%	22%
Total		100%	100%

Learning Appraisal Descriptions

Midterms and Final Exam

The exams will consist of multiple choice, fill in the blank, and short answer questions and will draw on both lectures and the readings. For superior performance, you must have a clear understanding of both these sources of course content. You will be challenged to push beyond memorization of facts and to integrate and apply course material. Research shows greater long-term retention with multiple testing— not just studying—opportunities (Roediger & Karpicke, 2006). The final exam will be longer than the midterm exams and will be cumulative.

Optional Topic Exploration (OTE)

You may elect to do a project on a topic of your choosing that is related to the course materials. This optional project offers you the chance to explore a topic of your choice (e.g., qualitative methods, intersectionality in psychology, etc.) in greater depth than the lecture and text can offer and reduces the weight of the midterm and final exams. You will need to clear your project topic and format with the instructor. This can be done informally by email (or in person) by Sept 27. You will submit a preliminary draft/notes by Oct 25 and a final version by Dec 10. You are expected to read a minimum of 3 peer-reviewed journal articles to inform the content and format of your project. Your project should be one that is done for this course exclusively; handing in work done for another course (past or present) is not acceptable.

Lab Research Project

The heart of PSYC 217 is the Lab Research Project. You gain experience working in a team to design an experiment from scratch, collect data from classmates, conduct some basic analyses, as well as present your work in a poster session (collaboratively as a group) and a written APA-style report. There are four graded elements to this Project (regardless of which section of this course you take). 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 6 "Labs" embedded throughout this course, led by one of our four 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.

Individual Reports

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 on Canvas.

Lab Engagement Activities

The vast majority of research conducted in psychology is collaborative. Reflecting this research approach, you will work closely in group of 5-6 on this project. Groups will be assigned immediately

after the add/drop period. To help your group work together, we have developed a series of prompts, tasks, and spaces to collaborate all within the Canvas environment (whether or not you can all get together at the same time). These prompts include a mix of tasks you'll do as a group (e.g., experiment plan with operational definitions), and some you will complete individually (learning reflections, restating experiment plan in your own words, peer evaluations of others' contributions). All of your contributions, including your TF's and your groupmates' evaluations of your contributions, will be combined into this score. We encourage you to work together in the spirit of collaboration. We also know that group work can sometimes be challenging. You are always welcome to ask for advice from me and/or your TF on your team dynamics.

Poster Session

Approximately 800-900 students, ~18 Teaching Fellows, and 5 Instructors from all sections of PSYC 217 will meet online to share and learn about everyone's research projects. 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.

Top Hat Participation

Active participation during lectures will be essential for you to learn the material, prepare for exams, and get the most out of this course. I will aim to incorporate a few Top Hat questions into each lecture to check for understanding of key concepts and to encourage active participation and discussion. Please have the Top Hat website open during lecture so you can answer questions in real time. For students who are unable to participate in Top Hat for time zone reasons, an alternative arrangement can be made. (See Canvas for more details.)

Participation will be graded in the following manner:

If you respond to the majority of questions in...	You will receive...
80-100% of all classes with Top Hat questions	4%
70-79% of all classes with Top Hat questions	3%
60-69% of all classes with Top Hat questions	2%
50-59% of all classes with Top Hat questions	1%
0-49% of all classes with Top Hat questions	0%

Research Experience Component (REC/HSP credits/Library Assignments)

The REC is worth 5% of every PSYC 217 student's course grade: 1 hour of participation or 1 article summary = 1% x 4, plus 1% for completing the online Tri-Council Policy Statement (TCPS) tutorial. 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.

One way to meet the REC requirement is to spend four hours participating in psychology studies through the Department of Psychology's Human Subject Pool (HSP) system. You can locate and sign up for studies by going to <https://hsp.psych.ubc.ca>. If you don't already have a user account you will

first need to request an HSP user account on that webpage. Once you have an account and have logged into it, you will be able to browse through all of the studies in which you can participate, sign up for studies and confirm your accumulated credits. The subject pool typically closes on the last day of class; I strongly urge you to participate before the last week to ensure appointments are available. Further instructions on how to use the HSP online system can be found at <https://psych.ubc.ca/undergraduate/opportunities/human-subject-pool/> in the document entitled Subject Pool Information for Participants.

As an alternative to participating in subject pool studies, you may choose to fulfill the REC by completing four library writing projects, for which you read and summarize a research article. Each article summary counts as one hour of research participation. You must select a research article (not a letter to the editor, commentary, or review paper) published since the year 2000 in the journal Psychological Science. Each summary should be about 500 of your own words and should summarize the purpose, method and results of the study. 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.

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.

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](#).

Course Policies

Attendance

Lectures will be recorded and posted after class. While lecture slides will be posted **after** class, these are NOT a substitute for lecture, and exams will contain some amount of content only provided in lecture. Lecture slides are numbered so that you can take notes corresponding to each slide during lecture.

In the Classroom

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. Therefore, please make sure that you’re familiar with

[UBC's policy on building and maintaining a respectful environment](#). 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/>

Late Passes

Every student will be allocated TWO 1-day late passes. They can only be used for the Communicating Psychology Assignment and/or the APA-style lab report. Use them all at once (2 days for one item), or separately (e.g., 1 day for 2 item). After those two days have been used, standard late deductions will apply (except in emergency circumstances). You do not need to ask/email to request late pass use; they will be applied by the TFs to late submissions.

During Exams

Exams will be in person and will take place during class time. Every exam will require you to fill out a Scantron sheet in response to multiple choice questions, and therefore it is *your responsibility* to bring a **pencil** and eraser to every exam. You will not be allowed to write the exam if you are more than 30 minutes late, or if another student has already submitted his/her exam, if that occurs first. When time is called you must immediately stop writing, remain quiet and follow the instructions for submitting your exam. This means you will not be given extra time to put your name and/or student ID on your Scantron form or exam, change an answer, etc. Failure to comply with any of these instructions will result in a '0' on your exam.

If you have three or more final exams scheduled to start and finish within a 24-hour period, you may request to write the second exam on a different day. You must make this request to the instructor giving the second exam at least one month before the exam date. If you absolutely must miss the final exam due to an extenuating circumstance like severe illness, you or your caregiver must apply for Academic Concession by contacting your Faculty's Advising Office.

Missing Exams/Quizzes

If you are aware of scheduled UBC-sanctioned sport travel or a religious obligation that conflicts with the date of an exam/quiz, you **MUST** contact the instructor within the *first two weeks of classes* so that alternate arrangements can be made. If you miss an exam/quiz for a university-approved reason, you must contact the instructor *before the exam* or as soon as possible after the exam. Concessions relating to missed tests need to be coordinated with the instructor within one week of the original exam date. If you miss an exam for any other reason (e.g., work commitments, sleeping in, forgetting there was an exam, etc.), you will receive a "0" on the exam.

Reviewing Exams/Quizzes

There will be an exam review period scheduled after the exam marks are released. Your TA will run this review session, and will be available to answer any questions or concerns regarding your exams. Should you be unable to attend this review session, you must contact your TA to make alternative arrangements to see your exam. You must arrange to see your exam **within 2 weeks** of the grades being released. Following this two week period, your exam will not be available.

Access and Diversity

UBC is committed to equal opportunity in education for all students including those with documented physical disabilities or learning disabilities. If you have a disability that affects your learning or performance on tests or exams please visit <http://students.ubc.ca/about/access> and take the necessary steps to ensure your success at UBC.

Grades

In Psychology at UBC-V, we employ department-wide grading standards to promote equitable alignment, supporting students and course instructors as they learn and teach across many diverse courses and sections. For each course section, instructors should aim for a grade average in the following Target Ranges (before any bonus HSP points are added, but including any mandatory HSP points): **B- (68-71%) in Introductory 100-level and 200-level courses;** B (72-75%) in Intermediate 300-level courses; B+ (76-79%) for Advanced 400-level courses and Selective-Entry lower-level courses (e.g., PSYC 277, 278, 312, 370, 371, 349, 359, 365). Ranges

<u>Letter Grade</u>	<u>Percent</u>	<u>Letter Grade</u>	<u>Percent</u>
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		

are intended to provide some flexibility to instructors and account for differences that can occur between classes. Ranges increase across year levels to account for improvements in student learning, and students' ability to self-select into more specialized courses. During the course, instructors may choose to adjust grades and/or difficulty of the assessments, to align with the Target Range. 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.

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 these also cannot be redistributed (e.g., posted on any other website, or shared in any other way) without instructor permission. Violation of these policies may lead to academic discipline.

Academic Misconduct

Cheating on exams will result in a score of 0 for that exam. Lab assignments must be completed independently unless otherwise stated. Sharing your answers to lab 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 academic misconduct will be reported to the university for appropriate action.

Psychology Department's Position on Academic Misconduct

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. For details on pertinent University policies and procedures, please see Chapter 5 ("Policies and Regulations") in the UBC Calendar (<http://students.ubc.ca/calendar>).

Unless explicitly authorized by the instructor, use of generative AI (e.g., Chat GPT, OpenAI) for lab assignments is not permitted and will be considered academic misconduct.

Helpful Resources

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

- Guidance on useful skills for students: <https://learningcommons.ubc.ca/student-toolkits/>
- Student's guide to Canvas: <https://students.canvas.ubc.ca/>
- Mental health support: <https://students.ubc.ca/covid19/mental-health-during-covid-19-outbreak>
- Counselling Services: <http://students.ubc.ca/livewell/services/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	Dates	Topic [readings]	Lab
1	Sept 6	Introduction [syllabus]	
2	Sept 13	Principles of Science [Ch 1] Variables & Articles [Ch 2 & Ch 5 pp 100-102]	Begin Introduction to Lab module
3	Sept 20	Research Design [Ch 4]	Complete Intro to Lab module, begin Lab 1 module
4	Sept 27	Experimental Design [Ch 8] Lab 1: Research Design (go to LAB ROOMS)	Continue with Lab 1 module
5	Oct 4	Conducting Studies [Ch 9] Ethics [Ch 3]	Complete lab 1 module, begin Lab 2 module
6	Oct 11	Midterm 1 (Ch 1, 2, 4, 8, 9, 5 [pp 100-102 only]) Lab 2: Proposal Presentation (go to LAB ROOMS)	Continue Lab 2 module
7	Oct 18	Survey Research & Sampling [Ch 7] Measurement [Ch 5]	Complete Lab 2 module, begin Lab 3 module Lab Peer Evaluations #1 due Oct 20
8	Oct 25	Descriptive Statistics [Ch 12] Lab 3: Data Collection (go to LAB ROOMS)	Continue Lab 3 module
9	Nov 1	Descriptive Statistics [Ch 12] Lab 4: Data Analysis (go to LAB ROOMS)	Complete Lab 3 module, begin Lab 4 module
10	Nov 8	Midterm 2 (Ch 3, 5, 7, 12) Complex Research Designs [Ch 11]	Complete Lab 4 module, start Lab 5 module
11	Nov 15	Lab 5: Writing Reports (go to LAB ROOMS)	Complete Lab 5 module
12	Nov 22	Complex Research Designs [Ch 11] Inferential Statistics [Ch 13]	
13	Nov 29	Inferential Statistics [Ch 13] Special Research Designs [Ch 10]	Nov 24 – APA style lab report due 11:59pm
14	Dec 6	Generalizability [Ch 14] Final Exam Review	Lab Peer Evaluations #2 due Dec 8
Poster Session (Wednesday Dec 4th, 5:00-6:30pm at Life Sciences Institute)			
Final Exam (cumulative, during final exam period [Dec 10 – Dec 21] TBD by registrar)			