PSYC 217 007 Research Methods

Tues & Thurs 2:00pm – 3:30pm Room: AERL 120

Instructor



Dr. Grace Truong

Office location: Kenny 3505

Office hours: Thursdays, 3:30pm-4:30pm

Email: gracet@psych.ubc.ca

Grace in ≤ 25 words: BC born and raised; all degrees from UBC; studies ownership + attention; likes hiking, food, board games, and oceans; dislikes bad drivers and heat waves

In This Syllabus

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Teaching Fellows (TFs)

TFs are here to help you learn and to help me to evaluate your learning. They will teach 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.

Brandon Tomm

Office location: Kenny 2533

Office hours: Wednesday days, 10am-12pm

Email: brandon.tomm@psych.ubc.ca

TA in ≤ 25 words: Brandon Tomm is a PhD student studying

cognitive science.

Spencer Murch

Office location: Kenny 3508

Office hours: Mondays, 3:00pm-4:00pm

Email: spencer@psych.ubc.ca

TA in ≤ 25 words: Spencer is a

PhD student in Cognitive Science
at UBC Psychology. His research
looks at the experiences and
physiological reactions that people

have when they gamble.

Cindel White

Office location: Kenny 3526

Office hours: Thursdays, 10:30-11:30am

Email: cwhite@psych.ubc.ca

TA in ≤ 25 words: I am a graduate student in Social/Personality Psychology, researching moral psychology,

social cognition, and the causes and consequences of religious

beliefs.

Holly Engstrom

Office location: Kenny 1113

Office hours: Tuesdays, 11:00am-12:00pm

Email: h.engstrom@psych.ubc.ca **TA in ≤ 25 words**: I'm a social psychology PhD student, studying

how people's socioeconomic status affects their social interactions. I like coffee, dogs, and talking about research.

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.

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, 2019, or before Oct 11, 2019 for withdrawal with a standing of "W" on your transcript.

Course Materials

Textbooks

Cozby, P. C. & Rawn, C. D. (2016). *Methods in behavioural research* (Second Canadian Ed.). Toronto, ON: McGraw-Hill Ryerson.





Cuttler, C. (2010). *Research methods in psychology*. Dubuque, IA: Kendall Hunt. *[optional book]* E-book available: https://he.kendallhunt.com/product/research-methods-psychology-student-lab-guide

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.

i>Clicker (or Reef App with access code). Available at the UBC bookstore.

This is required for your class participation grade.

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 the discussion board.

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. The texts are also on reserve at Koerner library.

Learning Appraisals at a Glance

| Learning Appraisal Activity | Date | Percent of Total Grade |
|--|--|------------------------|
| Quiz 1 | Oct 1 | 9% |
| Quiz 2 | Oct 17 | 9% |
| Quiz 3 | Nov 12 | 9% |
| Communicating Psychology Assignment | Nov 5 | 5% |
| Lab Research Project ➤ Team poster/oral presentation, 10% ➤ Individual report, 25% | Individual report due Nov 25 @ 11:59pm Poster – Nov 29 | 35% |
| Research Experience | TCPS (Sept 24) | F0/ |
| Participation in studies, 4%TCPS completion, 1% | Participation in studies occurs throughout term | 5% |
| In class participation (iClicker/REEF) | Throughout term | 3% |
| Lab Research Peer Evaluation | Dec 1 | 1% |
| Final Exam | TBD | 24% |
| Total | | 100% |

Learning Appraisal Descriptions

Quizzes and Final Exam

The quizzes and the final exam will consist of multiple choice and short answer questions. These 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 final exam will be longer than the quizzes and will be cumulative.

Communicating Psychology Assignment

This brief assignment offers you experience finding an 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. These skills provide the foundation for communicating about psychological research, and are relevant wherever you take your psychology degree. Your assignment should be no longer than 2 pages, and answer only the questions provided in the handout on Canvas.

Lab Research Project

The purpose of this project is to give you—and everyone who takes PSYC 217—an opportunity to apply what you are learning in class to a real research project. You will work in a team to generate and test a hypothesis about human behaviour, and you will report these results in professional written and poster formats. This project has been designed to incorporate as many elements as possible of the process in which psychological scientists engage to gain insight into human behaviour. You will receive guidance from your Teaching Fellow at each stage of the process.

Lab Meetings & Working with your Lab Team

Lab Meetings will take place during class time, but in a smaller room, throughout the term. Attendance at all Lab Meetings and the Poster Session (**Nov 29**) is required. All of the lab meetings involve crucial teamwork and are therefore mandatory. You will lose 1/7th of your lab grade (i.e., 5% of your course grade) for each of these meetings that you miss (e.g., if you miss 2 of those 5 meetings, you will lose 10% of your course grade, simply for not showing up to contribute to your team).

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 published in a journal. This individual report is designed to give you experience with a part of this process.

Reports are to be prepared independently; each team member must prepare a report separately from other team members. Evidence of collaboration or team work in writing the reports will result in major deductions from your lab component grade and in severe cases may result in a grade of zero on the lab component. Information relating to the structure and formatting of the reports will be posted on Canvas.

Lab Research Peer Evaluation

To encourage everyone to contribute to the group project, all of you will be able to evaluate each other and have it count towards your grades. On-time completion of the evaluations will give you 1%.

iClicker/REEF 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 iClicker questions into each lecture to check for understanding of key concepts and to encourage active participation and discussion. Please bring your clicker (or REEF-enabled device) to every class; it is not possible to make up iClicker points if you are absent or if you forget your clicker/device.

Participation will be graded in the following manner:

| If you respond to the majority of questions in | You will receive |
|--|------------------|
| 90-100% of all classes with clicker questions | 3% |
| 80-89% of all classes with clicker questions | 2.5% |
| 70-79% of all classes with clicker questions | 2% |
| 60-69% of all classes with clicker questions | 1.5% |
| 50-59% of all classes with clicker questions | 1% |
| 0-49% of all classes with clicker 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 (details given in Lab 1). 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. NOTE: THE ARTICLE YOU CHOOSE FOR THE COMMUNICATING PSYCHOLOGY ASSIGNMENT CANNOT COUNT TOWARD THIS CREDIT. WE WILL BE CROSS-CHECKING THE ARTICLES. 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

I expect you to attend every lecture. While I will be posting lecture slides **after** class, these are NOT a substitute for lecture, and exams will contain a significant amount of content only provided in lecture. I will number our lecture slides so that you can take notes corresponding to each slide during lecture. If you must miss a class, please contact your fellow classmates to obtain notes and/or information on what you missed. You can use the discussion forums on Canvas to arrange sharing of notes and content from missed class with other students.

In the Classroom

Your behaviour in the classroom reflects on you as a person and student. Treat your instructors, fellow classmates, and anyone else that might be a part of our class with respect. This means being courteous and respectful when asking questions or making comments during class, and not monopolizing a discussion or question period.

Laptop Use

I understand that many students use laptops or other electronic devices as learning tools. However, some students use their laptops during class for activities that are not related to this course. This can easily distract students sitting nearby. For this reason, I ask that anyone using a laptop or similar device for activities unrelated to the course sit at the back of the classroom.

During Exams

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. You may not leave the room (e.g., to use the bathroom) unless you have provided us with medical documentation 24 hours prior to the exam indicating a medical condition that might require you to leave the room. You will have **35** minutes to write each quiz, and 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 you Scantron form or exam, change an answer, etc. Failure to comply with any of these instructions will result in a '0' on your exam.

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. There will be no make-up exams/quizzes. Instead, the weight of the exam/quiz will be transferred to the final exam. 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.

Grades

In order to reduce grade inflation and maintain equity across multiple course sections, all psychology courses are required to comply with departmental norms regarding grade distributions. According to departmental norms, the average grade in a 100- and 200-level Psychology courses are 67 for an exceptionally strong class, 65 for an average class, and 63 for a weak class, with a standard deviation of 14. 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. You will receive both a percent and a letter grade for this course.

| <u>Letter</u> Grade | Percent | <u>Letter</u> Grade | Percent |
|------------------------|----------|------------------------|---------|
| 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 | | |

Academic Misconduct

Cheating on exams will result in a score of 0 for that exam. Lab assignments must be completed independently. 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. Using another student's clicker to answer questions for him or her is also considered cheating. If you are caught with more than one clicker in class, both clickers will be confiscated and you will both receive a 0 for course participation. All forms of cheating 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).

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.

Helpful Resources

The Kaleidoscope:

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:

students.ubc.ca/livewell/services/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: ams.ubc.ca/services/speakeasy/

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: www.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.

UBC Wellness Centre: students.ubc.ca/livewell/services/wellness-centre

Phone number: 604-822-8450

Speak with other students about tips for managing stress, keeping healthy sleep and eating patterns, concerns about safe sex and more.

Access and Diversity: students.ubc.ca/about/access

604-822-5844

Access and Diversity provides accommodations for students living with physical or mental disabilities.

Student Health Services: students.ubc.ca/livewell/services/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: ubc-mooddisorders.vch.ca/

A psychiatric program designed specifically to treat individuals living with depression or bipolar disorder.

Live Well, Learn Well: students.ubc.ca/livewelllearnwell

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: 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: ams.ubc.ca/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: 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: 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.

Course Schedule

| Week | Date | In-Class Topic | Reading & Assignments |
|------|------------|------------------------------|---|
| 1 | T Sept 3 | Imagine Day – no class | |
| | TH Sept 5 | Introduction | Syllabus |
| 2 | T Sept 10 | Principles of Science | Ch. 1 |
| | TH Sept 12 | Variables and Articles | Ch. 2 |
| 3 | T Sept 17 | Research Design | Ch. 4 |
| | TH Sept 19 | Research Design | Ch. 4 |
| 4 | T Sept 24 | Conducting Studies | Ch. 9 |
| | | | TCPS-2 certificate due |
| | TH Sept 26 | Lab 1: Research Design | |
| 5 | T Oct 1 | Quiz 1 (Ch. 1, 2, 4, 9) | Ch. 7 (pp 131-143) |
| | | Experimental Design | & Ch. 8 |
| | TH Oct 3 | Experimental Design | Ch. 7 (pp 131-143) |
| | | | & Ch. 8 |
| 6 | T Oct 8 | Measurement | Ch. 5 |
| | TH Oct 10 | Lab 2: Proposal Presentation | |
| 7 | T Oct 15 | Ethics | Ch. 3 |
| | TH Oct 17 | Quiz 2 (Ch. 5, 7, 8) | Ch. 10 |
| | | Complex Research Designs | |
| 8 | T Oct 22 | Complex Research Designs | Ch. 10 |
| | TH Oct 24 | Lab 3: Data Collection | |
| 9 | T Oct 29 | Descriptive Statistics | Ch. 12 |
| | TH Oct 31 | Lab 4: Data Analysis | |
| 10 | T Nov 5 | Descriptive Statistics | Ch. 12 |
| | | | Communicating Psychology Assignment due (11:59pm) |
| | TH Nov 7 | Inferential Statistics | Ch. 13 |
| 11 | T Nov 12 | Quiz 3 (Ch. 3, 10, 12) | Ch. 13 |

| | | Inferential Statistics | |
|---|-----------|--------------------------|---|
| | TH Nov 14 | Lab 5: APA-Style | |
| 12 | T Nov 18 | Special Research Designs | Ch. 6 & Ch. 11 |
| | TH Nov21 | Special Research Designs | Ch. 6 & Ch. 11 |
| 13 | T Nov 26 | Sampling | Nov 25 – lab report due |
| | | | Ch. 7 (pp 143-159) |
| | TH Nov 28 | Generalizability | Ch. 14 |
| | | | Peer Evaluations due Dec 1 (11:59pm) |
| Poster Session (Nov 29, time and location TBD) | | | |
| Final Exam (cumulative, during final exam period, see note below) | | | |
| | | | |

Schedule is subject to change as term progresses. Updates will be announced in class.

Important

The Final Exam will take place during the final exam period, which runs from December 3 to December 18. Saturdays are included in the final exam period. 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.