

**PSYCHOLOGY 217 (Section 005):
Research Methods
Dr. Victoria Savalei**

Course Information

Class Days: Tues/Thurs
Class Times: 11—12:30
Website: www.connect.ubc.ca

Instructor

Name: Victoria Savalei, Ph.D.
Office: Kenny Building, Room 3410
Email: v.savalei@ubc.ca
Office Hour: Thurs 3:30-4:30, or by appointment

Meeting Rooms

Lecture: AERL 120

Labs: PCOH (Ponderosa Commons) 1008, 1009, 1011, and 1215

Note: You will be assigned to *one* of these lab rooms, based on the lab section you will be placed in. We will post your lab section assignments on *Connect* shortly before the first lab.

Extra Data Collection Day (Oct 31st, 5-6:30 pm, *optional*): SWING 122

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, assist in class, hold office hours, monitor discussions on Connect, and respond to brief questions sent via email. If you cannot make their scheduled office hours, email them to work out an alternative appointment.

Name: Mason Silveira
Office: Kenny 3514
Email: silveira.mason@psych.ubc.ca
Office Hour: Thurs 1-2
Lab Location: PCOH 1008

Name: Shunfu Hu
Office: Kenny 1101
Email: hu.shunfu@psych.ubc.ca
Office Hour: Mon 1-2
Lab Location: PCOH 1009

Name: Aram Bernardos
Office: Kenny 3525
Email: abernardos@psych.ubc.ca
Office Hour: Wed 11-12
Lab Location: PCOH 1011

Name: Debra Bercovici
Office: Kenny 3506
Email: debrabercovici@psych.ubc.ca
Office Hour: Mon 3-4
Lab Location: PCOH 1215

Some Notes on Contacting Us via Email

- Before emailing, please check the syllabus for an answer to your question.
- Please include “Psych 217” in the subject line of all emails.
- Please use professional style and tone in emails. Here is a fun yet educational [post](#) about this.
- Please sign your email with your full name.
- Please use your UBC email account.
- Please be brief—if your email is longer than a few sentences, or requires more than a sentence or two in response, consider attending office hours instead.
- The answer to the question “Did I miss anything?” is always “yes.” This question has even inspired some [poetry](#) from a prof! If you miss a class, first ask a classmate for notes; then ask us for further help if you still need it; this way we’ll know that you’ve taken your absence seriously.
- We will do our best to respond to emails within 48 hours of receipt, excluding evenings and weekends.

Required Materials

1. Cozby, P. C., & Rawn, C. (2016). *Methods in Behavioural Research* (2d Canadian Ed.). Toronto, ON: McGraw-Hill Ryerson.
 - Do not use an earlier edition. There are substantial changes, including completely rewritten chapters.
2. Stanovich, K. E. (2013). *How to think straight about psychology* (10th ed.). Boston, MA: Pearson.
 - The 9th edition is acceptable to use. This text can be bought or rented [electronically](#).
3. Cuttler, C. (2010). *Research Methods in Psychology: Student Lab Guide*. Dubuque, IA: Kendall Hunt.
4. [iClicker](#) Student Response System
 - Bring to every class. Carry spare batteries. Register your iClicker on Connect to receive your points.
5. Additional readings and videos will be announced in class and on Connect.

Course Objectives

This course is designed to provide you with an understanding of psychology as a science. By examining common misconceptions about psychology, you will become a more critical and discriminating consumer of scientific knowledge. You will learn how to critically evaluate claims made in the media and in the self-help literature, and how to tell science from pseudoscience. We will explore the foundations of the scientific method, the core experimental and non-experimental research designs psychologists use to test their hypotheses, and current issues in our science (e.g., replication, ethical practices). You will learn how psychologists acquire knowledge, and you will even partake in this process: The lab component of the course is designed to give you first-hand experience with every stage of the research process (from designing a study to preparing a research report).

Grades

Your course grade will be a combination of the following assessments:

Type of Assessment	Percentage	Deadline & Details
Quizzes	20%	Sept 27, Oct 18, Nov 10, Nov 24
Lab Component	35%	25% Lab Report (due Dec 1st) + Lab Attendance; 10% Poster Session on Friday, Dec 2)
Short Writing Assignment (SWA)	5%	Nov 3
Research Experience Component (REC)	5%	HSP participation 4% (by Dec 1 , or for library option, ten days prior) Ethics Certificate 1% (Oct 13)
Participation	5%	During most lectures via iClicker (3%); During some lectures via group activities (2%)
Final Exam	30%	During the final exam period, Dec 6-21

Quizzes (20%)

Instead of a traditional midterm-final structure, the midterm assessment will be spread out over four quizzes. Quizzes will be given during the first 15 minutes of class (see above for dates). Since these quizzes occur at the start of class, you really need to make sure that you are on time and prepared. The quizzes will generally focus on material covered in class since the previous quiz, but when exceptions occur, I will let you know in class the lecture before. The quizzes are less demanding and stressful than a single long exam. We will go over the answers to the quiz during the next class, so you will get feedback quickly. Finally, you will likely find that studying for a final exam is much easier because you've already rehearsed course material several times throughout the course.

Make-up quizzes will not be given. In case of a legitimate absence, your quiz score will be obtained by averaging the remaining three quizzes. If you miss a quiz, you must provide legitimate documentation for the absence. To claim legitimate absence, you must a) contact me either before the quiz or on the day of the quiz, and b) provide

proper documentation (for instance, medical notes must have the name and phone number of the clinic, and they will be verified). Your absence will not be considered legitimate without documentation, *no exceptions*.

Final Exam (30%)

The final exam date and time will be designated by the Registrar. You must be available to write your final exam at any scheduled time within the official exam period. If you have 3 or more exams scheduled within a 24 hour period, you may request to write the second exam on a different day. However, you must give the instructor of the second exam one month notice. Please note that the final exam is *cumulative*. There will be no make-up final exams. If miss the final exam for a legitimate reason (documented illness is just about the only reason), you will receive an SD (Standing Deferred) grade in the course, and will write the final the following summer, as scheduled by the university.

Lab Component (35%)

You will complete a lab project in a group of 4-6 students. The purpose of the lab project is to give you hands-on experience with every stage of the research process. The lab meetings for these projects will take place in lab break out rooms. Check Connect to find the lab room to which you have been assigned (we will assign everyone to lab sections and lab groups immediately in the third week of the semester, after the final day to withdraw). You are not permitted to switch groups or lab sections. There will be a total of 5 lab meetings (see course outline). Attendance at the first three lab meetings is MANDATORY because they involve group work. You will lose 20% of your lab grade (i.e., 7% of your total course grade) for *each* meeting you miss (i.e., if you miss 2 meetings you will lose 40% of your lab grade). Additionally, there will be a poster session on **Friday, Dec 2, 5-6:30 pm**. Attendance at the Poster Session is also MANDATORY. You must participate in the creation of the poster AND you must attend the poster session to receive a grade for the poster (which is worth 10% of the course grade).

If you miss a lab or the poster session for a legitimate reason, please see the Request for Excused Absence form (posted on Connect). For planned absences, this form must be submitted at least 14 days in advance. For emergency absences, this form must be submitted within three days of the missed event. Please note that *submitting this form does not guarantee that your absence will be approved*. Your absence will only be approved if it was for a legitimate emergency and with proper documentation. To insure consistency and fairness in making these judgments across sections of 217, all absences will be reviewed by the course coordinator Dr. Benjamin Cheung.

A note on teamwork: I encourage you to work together. I also know that team work can sometimes be challenging. To help you achieve excellence in your projects, each team will have a private discussion thread on Connect to collaborate with each other throughout the term. Using this thread provides a permanent record of your team collaborations, and might be helpful if a team dispute arises. You are always welcome to seek me and our TFs out for help and advice on your team dynamics. If your team is having challenges, there is a form on Connect that you can submit for *a formal request for mediation*. In the past, such mediation has typically led to positive team progress.

Lab Meetings:

Lab Meeting I: You will meet with your group to brainstorm a research question and design a brief, simple, minimal risk experiment to address the question. The experiment must not require more than 5 minutes of each participant's time. A teaching fellow will be present to assist and guide you. Since you will only have 75 minutes to come up with a research question and design you should come to this meeting prepared with some ideas. Discussion boards will be set up on Connect for each group a week prior to this lab so that you can toss around ideas with your group beforehand.

Lab Meeting II: In the second meeting your group will give a 5 minute presentation of your proposed research question and design. During this presentation you should: i) state your research question, ii) sell your

idea (i.e., provide information on why this question is interesting and/or important), iii) clearly describe the independent variable and how it will be manipulated, iv) describe the dependent variable and how it will be measured, v) discuss any controls you plan to implement, iv) state your hypotheses. Each presentation will be followed by a 5 minute discussion period where your classmates and teaching fellow will ask questions and provide suggestions for improvement.

Lab Meeting III: In the third lab meeting you will collect data for your experiment using your classmates from a different lab section of the course as participants. Your group must arrive to this meeting with all of the materials needed to conduct your experiment, including the Consent Form (posted on Connect). During this meeting you and your group members will be expected to take turns collecting data for your experiment and serving as participants in other groups' experiments. This meeting is the primary (and required) opportunity to collect data. Your team may also opt to collect data (along with other teams across all sections) on Monday Nov 3, 5-6:30 in Swing 122 (this is a completely optional additional time, designed to allow you to indulge your curiosity about your hypothesis of interest by giving it a more powerful test.) There will be no other time for your team to collect data for your experiment. Collecting data outside these two meeting times and/or with individuals other than your 217 classmates and Teaching Fellows is not covered by our ethics approval certificate (H13-01648) and will result in a major deduction from your lab component grade. While some team members are collecting data, you may participate in other teams' studies. See Cuttler (Ch. 3) for further guidance and tips.

Lab Meeting IV: During this lab meeting your Teaching Fellow will show you how to summarize data and use Excel to calculate descriptive statistics and create graphs. You should come to this meeting prepared with a plan for summarizing your data that you can discuss with your teaching fellow.

Lab Meeting V: During the final lab meeting your Teaching Fellow will teach you how to write an APA style research report. You should come prepared with a rough draft of your paper as well as specific questions and problems you are having with its preparation.

Poster Session (10%):

Students from across all sections of Psychology 217 will come together to share and learn about each other's research projects. You will be asked to prepare, as a group, a poster that summarizes your research project's hypothesis, method, results, and conclusions. This kind of presentation is common at professional scientific conferences. During the poster session, you will be asked to evaluate approximately five of your peers' posters (from a different section). Your own poster will be evaluated by five peers (the average of these five ratings will equal 3% of your grade), as well as by a Teaching Fellow (whose rating will comprise the other 7%). 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. THE POSTER SESSION IS A MANDATORY COURSE EVENT; MARK YOUR CALENDAR NOW.

Lab Report (25%):

Each group member must prepare his or her own report. Evidence of collaboration or team work in preparing the reports will result in major deductions from your lab component grade and in severe cases may result in a grade of 0 on the lab component.

Format: Your report must be written using APA style and must include the following sections: Abstract, Introduction, Method, Results (including at least one graph or table), Discussion, and References (at least 2). See Appendix A of the Cozby & Rawn text, the APA Publication Manual, and Cuttler (Ch. 5), for guidance in writing APA style reports. Reports must be between 5 and 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. You must use 12 point Arial, Times New Roman, or Calibri font and margins must be set to 1 inch all around. The introduction section should have at least 2 references to related empirical journal articles to set up a foundation for your hypothesis. Articles can also be used in the discussion section to help put results into context.

Submission: Reports are due on December 1st at the start of class. *Everything else that arrives in any other way will be considered late.* Please respect your fellow classmates by not assuming that you are entitled to extra time to finish this project while they are not. You will lose 2.5 points (10%) for each day the report is late (5% if the report is turned the same day but not at the start of class). An identical copy to the one submitted in class must also be submitted electronically to *TurnItIn* by 11 am on the same day (December 1st). If you fail to do either (submit it in person or to *TurnItIn*) by the designated time, your report will be considered late.

The purpose of the online copy is so that we can cross-check your paper with an enormous database of websites, past submissions, and published works. Because past submissions are stored forever somewhere in cyberspace, *remove your identifying information (name and student ID) from the TurnItIn submission.* To submit your paper, go to turnitin.com, create an account if you do not yet have one, enter our course ID (13268228) and password (ilovemethods), and submit your paper. The hard copy is considered the master copy and is what will be graded; the electronic copy must match it (except for identifying information removed from the title page).

Grading: You will be graded on the following: Abstract and Introduction (5%), Method and Experimental Design (5%), Results and Figures (5%), Discussion (5%), APA format and Writing style (5%). Cuttler (Ch. 5) and Lab 5 provide details about each section. Your report will not be graded until you have submitted your TCPS ethics certificate to your TA. Even if you miss the deadline to get 1% credit for it, you still need to complete it by the end of the term. You are now a researcher; you are not allowed to perform experiments on human subjects without ethics training.

Short Writing Assignment (SWA) (5%)

The short writing assignment asks you to find an empirical journal article using the university's library system, to identify the major features of the study design, and to communicate the most important findings from the study in a clear and understandable way. Your assignment should be no longer than 2 pages. Detailed instructions will be posted on *Connect*; please follow them closely as they also specify the grading rubric. The hard copy of your assignment is due in the lab on November 3d. An identical electronic copy (minus the identifying information) is due via *TurnItIn* by 11 am on the same day. See the instructions for the Lab Report assignment for *TurnItIn* details. If the hardcopy is submitted later on the same day, the assignment will be worth a maximum of 4.5%. If it is submitted the next day it will be worth a maximum of 4%, and so on. Please note that all these deadlines are for both the hardcopy and the *TurnItIn* submission—both submissions must meet the deadline.

Research Experience Component (REC) (5%)

The REC is worth 5% your 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 how psychology research is conducted.

Human Subject Pool (HSP) or Article Summaries (4%)

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 You can access studies at <https://ubc-psych.sona-systems.com/>. You need an active HSP account; if you do not have one, the website will tell you how to sign up. More information about the HSP can be found at <http://psych.ubc.ca/internal/human-subject-pool/>. 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.

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. *NOTE: THE ARTICLE YOU CHOOSE FOR THE SHORT WRITING ASSIGNMENT CANNOT COUNT TOWARD THIS CREDIT. WE WILL BE CROSS-CHECKING THE ARTICLES.* If you choose the library option, you must consult the document titled *Subject Pool Information for Participants* (located at <http://psych.ubc.ca/internal/human-subject-pool/>) for details of the submission process and the choice of articles. These summaries must be submitted at least 10 days before the end of classes; TurnItIn submissions are also required, but to a different class ID (see the document at the link above for details). Please note that I don't know which HSP option you ended up completing; all I get at the end of the semester is how many credits you received.

Tri-Council Policy Statement (TCPS) tutorial and Ethics Certificate (1%)

Since you will be conducting an experiment in the class, you must complete the TCPS Ethics Tutorial. The tutorial can be found at: <http://tcps2core.ca/welcome>. You will receive a *certificate of completion* which you must print and turn into your teaching fellow during Lab Meeting II. You will receive 1% if you submit your certificate on or before the due date. Late submissions will not receive credit. Please note that if you miss the Lab II deadline, you still must do the TCPS ethics tutorial and turn in the certificate to your TA before the Lab Report can be graded, but you will lose the 1%. Every year, a few students end up doing this, so don't let poor organizational skills penalize your grade!

Participation (5%)

iClicker points (3%)

You are required to attend lectures and participate using your iClicker. Not every class will contain iClicker questions, but most will. Some will contain more questions than others. It is your responsibility to make sure the battery in your iClicker is not dead, that you have switched to the right room frequency, and that you know how to use your Clicker appropriately. I will not award points manually after class, so make sure your vote is counted! *You are not entitled to iClicker points by merely showing up to class.* Your iClicker answers are not judged on correctness, but on participation. Clicker participation points cannot be made up, as the grading scheme already allows for missed days due to illness or other reasons. Participation will be graded in the following manner:

If you participate on...	You will receive...
all but 2 of eligible lecture days	3%
all but 3 lecture days	2.5%
all but 4 lecture days	1.5%
otherwise	0%

I will set the system so that it allows you to skip one *iClicker* question per lecture and still get full credit for that day. This is to allow you time to change a dead battery, or for the *occasional* days when you are running a few minutes late.

Group Activities (2%)

There will be in-class group activities throughout the semester, involving groups of 4-6 students. These will be short (10-15 min). During the first 2-3 weeks of class, you can form groups however you like. After that, in-class group activities will be done with your lab groups. For some, but not all, of these activities, there will be a worksheet for you to complete with your group; turning this worksheet in gets you the points. For some group activities, you will be asked to print the worksheet out ahead of time. At the end of the group activity, you will put the names of the *present and participating* group members on it and turn it in. Please note that putting down the names of students who are not present is a form of *academic misconduct* (see a later section). In addition, a group has the right to vote someone out if that person is not participating *at all* (e.g., texting on her

phone instead of listening to the group discussion). Any member of the group should feel free to talk to me about their experiences. I recommend that the group rotate its “leader” (i.e., the person who writes down the final answers on the worksheet). Everyone should *agree* on what is being written down. The discussion about what constitutes the right answer is where you learn the most from each other.

The group worksheets *will not be graded, except on effort*. If it looks like you’ve thought about the questions, even if you didn’t get it right, you will get the points. The grade you receive for this portion of the evaluation will be determined by the percentage of worksheets you receive credit for.

Psychology Department’s Policy on Grade Distributions and Scaling

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 mean grade in a 217 class must be in the 67-71 range, 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 instructor or department. In the vast majority of cases, your grades remain as they are. In the last 9 years of teaching this course, I have had to scale grades down only *once*, and it was only by 1%. Thus, your actual grade is a pretty good reflection of the grade you will receive, but do be aware of this policy. Please note that I did not write this policy, and I have no control over it!

Psychology Department’s Position on Academic Misconduct

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. In the first place, the Department has implemented 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. Your writing assignments will be scanned and compared to over 5 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 every student 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. For details on pertinent University policies and procedures, please see <http://www.calendar.ubc.ca/Vancouver/index.cfm?tree=3,54,111,959>.

Why is Academic Misconduct Treated So Harshly? Some people don’t feel like cheating on a test or taking a sentence or two from someone else’s paper without citing it is a big deal. Here’s a bit of insight into why we care so much. In the academic community—a community of which you are now a part—we deal in ideas. That’s our currency, our way of advancing knowledge. By representing others’ ideas in an honest way, we are (1) respecting the rules of this academic community, and (2) showcasing how our own novel ideas are distinct from but relate to others’ ideas. APA style gives us a formal way to indicate where our ideas end and where other people’s ideas begin.

What can you do to ensure you are acting ethically? First, recognize that all graded work in this course, unless otherwise specified, is to be original work done independently by individuals. Reference all material using APA style; if you cannot find a proper reference, question whether that source is appropriate to use. Do not copy and paste text from other sources, even in a draft, as you might unintentionally misrepresent those words as your own in a later draft (which would still qualify as plagiarism). UBC offers an online guide to preventing

unintentional plagiarism and organizing your writing. Visit <http://learningcommons.ubc.ca/resource-guides/avoiding-plagiarism/>

Tentative Course Schedule (last revised: 8/25/2016)

This schedule will be modified during the semester. Changes will be announced in class and posted on the course website. Students are responsible for being aware of these changes.

Week	Dates	Topics	Stanovich	Cozby & Rawn	Events
1	Sept 6 Sept 8	IMAGINE DAY (NO CLASS) L0: Introduction			Read the syllabus! ☺
2	Sept 13 Sept 15	L1: Principles of Science L2: Principles of Science (contd)	Ch 1-2 Ch 3	Ch 1 Ch 2	
3	Sept 20 Sept 22	L3: Experiments L4: Experiments		Ch 4	Last Day to Withdraw Register Your iClicker
4	Sept 27 Sept 29	L5: Experiments (contd) Lab Meeting I	Ch 6	Ch 9	Quiz #1
5	Oct 4 Oct 6	L6: Validity L7: Validity (contd)		Ch 8	
6	Oct 11 Oct 13	L8: Ethics in Research Lab Meeting II		Ch 3	TCPS Ethics Certificate due
7	Oct 18 Oct 20	L9: Measurement L10: Interlude. The Amazing Randi	Ch 4	Ch. 5	Quiz #2
8	Oct 25 Oct 27	L11: Measurement (contd) Lab Meeting III		Ch. 7 (pp. 131-147)	
9	Nov 1 Nov 3	L12: Factorial Designs Lab Meeting IV	Ch 9	Ch 10	SWA due
10	Nov 8 Nov 10	L12: Factorial Designs (contd) L13: Correlational Research	Ch 5	Ch 12	Quiz #3
11	Nov 15 Nov 17	L14: Quasi-Experimental Research Lab Meeting V		Ch 11	
12	Nov 22 Nov 24	L15: Sampling & Survey Research L16: Inferential Statistics	Ch 7 Ch 10	Ch. 7 (pp.147-159) Ch. 13	Quiz #4
13	Nov 29 Dec 1 Dec 2 (Fri)	L17: Generalizing Results L18: Generalizing Results (contd) Poster Session 5-6:30 pm, LSI East Atrium	Ch. 8	Ch. 14	Lab Report Due