

RESEARCH METHODS IN PSYCHOLOGY

PSYCHOLOGY 217-921: Summer 2015 Term 1

Meeting time: Mondays and Wednesdays 1-4 pm

Location: AERL 120

Welcome to Research Methods in Psychology! This course is foundational to obtaining a comprehensive education in Psychology. We will explore and critically examine the science behind the study of human behavior. My goal is that you will develop skills and knowledge that can be applied in other courses, your career and your day-to-day life. I believe intelligence is malleable and incremental and that all students are capable of thriving when given the right environment. To this end, I have made every effort to account for the impact of the classroom context in shaping students' learning and I have thoughtfully and deliberately designed each aspect of our course. I have high expectations for your success and I am certain you can achieve them. I will offer you my full support along the way by providing ample opportunities and resources for learning – the rest is up to you.

COURSE GOALS

By the end of this course, successful learners will be able to:

- Compare and contrast different methodologies for conducting psychological research
- Construct research questions and hypotheses, making appropriate predictions based on existing psychological literature
- Apply your knowledge of research methods by designing a study to test your own hypotheses and predictions
- Critically interpret findings from current psychological research studies
- Review and discuss current ethical considerations and best practices in the design, conduct and reporting of psychological research
- Cooperate with a team of peers to develop and manage a research project
- Communicate effectively about psychological research both orally and in writing

INTRODUCING YOUR TEACHING TEAM

Instructor: Alyssa Croft, PhD Candidate (*feel free to address me as Alyssa or Prof Croft*)

Email address: acroft@psych.ubc.ca

Office location: Kenny 3526

Office hours: drop-in between 12-1pm on Wednesdays or email me to make an appointment

Alyssa in ≤ 25 words: studies stereotypes and prejudice; enjoys playing cards/games & general socializing; dog person; Joss Whedon fanatic; dessert lover – especially ice cream; psyched about psych!

Teaching Fellows (they run the Labs, mark your papers/exams, and are your first point of contact):

| <u>Name</u> | <u>Office Hours</u> | <u>Office number</u> | <u>Email address</u> |
|-------------------|------------------------|----------------------|---------------------------|
| Kaitlin Laidlaw | 1-2pm on Thursdays | Kenny 3010 | klaidlaw@psych.ubc.ca |
| Eleni Nasiopoulos | 1-2pm on Tuesdays | Kenny 3010 | enasiopoulos@psych.ubc.ca |
| Ana Pesquita | 2:30-3:30pm on Fridays | Kenny 3606 | anapesquita@psych.ubc.ca |

REQUIRED MATERIALS

- Cozby, P. C. & Rawn, C. D. (2012). *Methods in Behavioural Research, First Canadian Edition*. McGraw-Hill: Toronto, ON.
 - Focuses on details of how to conduct research. Available new, used, or electronic (on CourseSmart).
 - Earlier/different Editions: I developed this course based on the Canadian edition of Cozby & Rawn. If you choose to use an earlier or international version of the text, you are responsible for identifying any differences between editions.
 - An OPTIONAL Online Learning Centre to accompany the textbook is available [here](#) with practice quizzes and other resources.
- You will need to subscribe to Top Hat for class participation.
 - The cost is \$24 for one semester or \$36 for a full year. <https://app.tophat.com/register/student/>.
 - You can connect to Top Hat using any device with wifi (e.g., laptop, iPad) or with any mobile phone (does not need to be a smart phone). If you do not have access to such a device, please contact me and I can help make special arrangements for you. Please visit the Top Hat website to register for a student account right away. Our course code is **015139**.
- Cuttler, C. (2010). *Research Methods in Psychology*. Kendall Hunt: Dubuque, IA.
 - This lab guide will help you and your teammates create a successful research project.

Optional resources: **Note: These books are NOT required, but might be helpful to you.

- Stanovich, K. E. (2013). *How to Think Straight about Psychology* (10th ed.). Boston, MA: Pearson.
- Publication Manual of the American Psychological Association* (6th ed.). (2009). Washington: American Psychological Association

ASSESSMENT OF LEARNING

Successful realization of course goals will be evaluated using carefully designed learning appraisals. The instructor will teach with those broad goals in mind and students are encouraged to focus on them as well. There will be a wide variety of activities used to measure students' comprehension of course material. The point of including different types of learning appraisals is to allow students the opportunity to showcase their strengths as well as to encourage further development in areas they might find challenging. Additionally, providing multiple channels for evaluation prevents any particular activity from biasing students' overall course grades. The table below shows an overview of the grade breakdown featuring the relative contribution of each learning appraisal. Details about each of the specific learning appraisals follow the table.

| Learning Appraisal | % Course Grade | Due Date(s) |
|--------------------------------------|----------------|---|
| Research Experience Component (REC) | 5% | All completed by Thurs, June 18 th |
| Collaborative Research Project | 20% | |
| Group presentation during Lab 2 (3%) | | May 27 th |
| Individual APA-style Report (17%) | | June 17 th by 11:59pm |
| Midterm exam | 30% | May 27 th |
| Final exam (cumulative) | 42% | Date set by Registrar, June 22-26 |
| Participation (in class and Labs) | 3% | Ongoing |
| Total | 100% | |

Research Experience Component (REC; 5%): The purpose of asking you to participate in research studies is twofold. First, it will serve to give you an inside look at research methods in action, further solidifying the concepts and material you are learning in class. Second, by participating in psychological research studies, you will be directly contributing to the advancement of our science as a whole. Up to 4% of your REC grade will come from research participation (1 hour of HSP studies or 1 article summary = 1% x 4). The final 1% of your REC grade comes from completing the online Tri-Council Policy Statement (TCPS) tutorial (details given in Lab 1). To find and sign up for studies in which to participate, go to <http://hsp.psych.ubc.ca> and create an account. The last day to participate in research studies will be June 18th, 2015, so please be sure to finish earning your credits before that deadline.

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. If you choose this library option, you must consult the document entitled *Subject Pool Information for Participants* (see page 4) located at <http://psych.ubc.ca/internal/human-subject-pool/> for details of the submission process.

Collaborative Research Project (20%): The purpose of the Collaborative Research Project (CRP) is to give you an opportunity to work in small groups to generate and test a hypothesis about human behavior that you are interested in, and to report those results in professional written form. 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 behavior. **As we cover topics such as hypothesis generation, research design, and basic analysis, you will immediately apply your knowledge to your CRP during Lab Meetings led by one of our Teaching Fellows or your instructor.** You will receive guidance at each stage. Labs will take place during the last hour of the class period on **May 20, May 27, June 3, June 8, and June 10.** *Attendance at all Labs is expected. However, the first three lab meetings involve crucial group work and are therefore mandatory. You will lose 20% of your lab grade for each of these meetings that you miss (e.g., if you miss 2 out of 3 of those first meetings you will lose 40% of your lab grade).*

GROUP ORAL PRESENTATION (3%): During Lab 2, 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. **THE PRESENTATION IS WORTH 3% OF YOUR GRADE.** All group members will receive the same mark based on the quality of your presentation within the strict 5 minute time limit. *See Cuttler's guide, Chapter 2, for further guidance and tips.*

INDIVIDUAL RESEARCH REPORT (17%): Reports are to be prepared **independently**; each group member must prepare his/her own report, separately from the other group members. Reports should be 4-6 pages, double spaced. These reports are due on the last day of class, by 11:59pm on June 17th, 2015, and should be submitted electronically through both our class *Connect* website and TurnItIn.com. More details regarding the content, formatting and specific guidelines for the report will be provided later in the term.

Midterm exam (30%): The midterm will be given in class on **Wednesday, May 27th**. The midterm will begin promptly at the beginning of class (1pm) and you will have 50 minutes to complete it. You may be tested on any material covered in lectures, presentations, videos or readings (including material that only appeared in class or only appeared in the textbook) – all course content is fair game. Questions may include a mix of multiple choice, true/false, fill-in-the-blanks, and short essay questions. The midterm will look for a **deep understanding of course content**, including the ability to apply and integrate concepts. Please bring a pencil, pen, and eraser. No make-up exams will be offered.

Final exam (42%): The purpose of the final exam is to solidify all the concepts and material you have learned throughout the term into a cohesive whole. The exam will be **cumulative** in nature and will cover both the material from class and from the textbook, across the duration of the term. The format of the exam will be a combination of multiple choice, fill-in-the-blank and short answer questions. The date of the exam will be determined by the Registrar during the final exam period, so please **do not make plans to travel until the exam date has been set**. No make-up exams will be offered.

Class Participation (3%): The purpose of evaluating your participation in class is to encourage you to take an active role in your own learning experience. To this end, you must be present during all class sessions, both physically and mentally. Because of the size of our class, it is challenging to measure individual participation on an ongoing basis. Therefore, your class contribution will be graded on (1) responses to Top Hat questions posed during class, and (2) participation in peer evaluation of your teammates for the Collaborative Research Project.

1. **TOP HAT PARTICIPATION (up to 3%):** We will be using an interactive student response system called Top Hat to facilitate in-class participation (see Required Materials above). We will use Top Hat in a variety of ways (e.g., answer questions about the readings, be able to give your opinion on course concepts/topics, and provide feedback about the course). You will be awarded .75 marks for submitting a response to a Top Hat question, and another .25 marks for correctness. To allow for illness or technical problems with Top Hat, specifically, **you can miss up to 20% of participation opportunities, and we'll still give you full marks for that portion of your participation grade**. The highest grades for participation will be awarded to those students who show thoughtful integration of the course material, contribute high quality (vs. quantity) comments that facilitate class discussions, are respectful of others' learning and are fully engaged during all in-class demonstrations and activities.
2. **PEER EVALUATION (-1% for failing to complete either of two evaluations):** Constructive feedback is part of any successful team project. You have the opportunity to evaluate and offer constructive feedback to your research project teammates – and to receive the same from them. By taking a few minutes to complete the peer- and self-evaluations, you will promote effective teamwork while avoiding a penalty to your participation mark. These evaluations will be conducted twice: first, after Lab 2 (due June 1st) for formative purposes. This is a chance for you to indicate what your teammates should keep doing well and what they need to work on. Occasionally, peer evaluations indicate a serious problem with a team member. If such an issue arises, your team will be asked to meet with the instructor. If evidence indicates that a team member is not contributing to the project, that person may be denied access to the data from Lab 3 and that person's final report will consequently suffer. The second team rating, a summative evaluation, will occur at the end of the term (due June 17th) and may count toward your teammates' final team project grade. The software program we will use to conduct these evaluations is called *iPeer*, and has been used extensively at UBC.
 - a. To submit your ratings: 1) log on to *Connect* using your CWL, 2) click on the link to *iPeer*, 3) complete the peer evaluation for each of your teammates and yourself. Be honest and constructive in your ratings. Keep in mind that your teammates will receive the feedback but will

not know which teammate said what. You will lose 1% of your class participation mark for each *iPeer* rating that is not submitted by the deadline.

COURSE AND DEPARTMENT POLICIES

Course Website: You can find the syllabus, PowerPoint slides (after class), important announcements, assignment information, and discussion forums on the class website on *Connect*. You are responsible for checking this site frequently. To access our website, go to www.connect.ubc.ca and log in using your CWL. Please check the website for course information *before* emailing your instructor or TF.

Missed Classes: If you miss all or part of any class, it is your responsibility to speak with one of your classmates to find out what course material and announcements you missed.

Special Accommodations: UBC accommodates students with disabilities who have registered with the Access and Diversity Office and students whose religious obligations conflict with attendance, submitting assignments, or completing scheduled tests and examinations. **Please let me know in the first week of class if you will require any special requirements as such.** Absences due to varsity athletics, family obligations, vacations, work scheduling, or other similar commitments WILL NOT receive special accommodation.

Email Etiquette: We (the instructor and TFs) are available and delighted to help students as much as possible throughout the term! Note, however, that we receive hundreds of emails every week. Therefore, when you have a question, you should first check the syllabus and course website, and then ask a classmate before emailing us. In the interest of saving time, any emails containing questions that can be answered by looking at the syllabus or website will not receive a response. Please allow *at least 24* hours before expecting a response to your message. If your question is a simple one, we may be able to answer it via email, but if your question is more complex, we may request that you come in during office hours or make an appointment so that we can discuss it with you in greater depth.

Grade Appeals: If you believe there was an error in the marking of your assignment/test, you may submit a formal request to have the mark reviewed no later than one week after the grade in question was posted on the *Connect* course web page. Please contact your instructor to file the request (you will be given a *Request Form* with specific instructions). Note that appeals for written assignments will result in a re-grading of the entire paper and your mark may go up or down. Please do not expect your TFs to change grades “on the spot” or during their office hours. All students, across all sections of Psych 217, must adhere to this formal grade appeal policy.

Late Assignments: Specific deadlines for each learning appraisal have been carefully and thoughtfully selected to allow students to reap the greatest benefit to learning by completing them on time. Students are highly encouraged to complete assignments on time, especially given that deadlines are provided well in advance. Late assignments will be accepted for up to one week following the original deadline. There can be no exceptions. Out of fairness to the students who met the original deadline, there will be a penalty of -10% per day, including weekends and holidays, that the assignment is late.

Electronics: Please turn off and put away all electronics that make sounds (e.g., phones, headsets). Laptop computers and tablets are acceptable for note taking purposes and Top Hat only (please do not use them to display other material as this is *very* distracting for other students).

Grade 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 200-level class is 67 for a good class, 65 for an average class, and 63 for a weak class (with a standard deviation of 14). Scaling is likely to be used in order to comply with these norms; grades may be scaled up or down as necessary by the instructor, department, or school. Therefore, grades are never official until they appear on a student's academic record.

Academic Integrity: As part of the academic community, you are expected to act honestly and ethically, just like the rest of us. 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. All materials (term papers, lab reports, etc.) that students submit for grading 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. All graded work in this course, unless otherwise specified, is to be original work done independently by individuals.

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.

Be careful and critical of what you read and choose to cite. Reference all material using APA style; if you cannot find a proper reference, question whether that source is appropriate. **Do not** copy and paste text from other sources, even in a draft. If you ever have any questions about what sources to use or how to cite them without plagiarizing, ***please see your instructor or TA before handing in your assignment.*** If you have any questions as to whether or not what you are doing is even a borderline case of academic misconduct, please consult your instructor. For details on pertinent University policies and procedures, please see Chapter 5 in the UBC Calendar (<http://students.ubc.ca/calendar>).

Do note that during exams, the instructor and invigilators **reserve the right to move students** in their seating arrangement with no explanation provided.

DETAILED COURSE SCHEDULE

**Note: Adjustments to this schedule may be made as needed.

| Week | Date | Topics | Assigned Reading | Important Events |
|------|---------|---|--|---|
| 1 | May 11 | Welcome! Course overview; science basics; hypotheses; falsifiability; operationism; and variables | C&R Ch 1 C&R Ch 2 C&R Ch 4 | *Register for Top Hat (instructions can be found above) |
| | May 13 | Correlational and experimental design basics; practical considerations | C&R Ch 8 C&R Ch 9 | |
| 2 | May 18 | VICTORIA DAY – NO CLASS! | | |
| | May 20 | Ethics and values in psychological research | C&R Ch 3 Lab Guide Ch 1 | *Lab 1 |
| 3 | May 25 | Experimental designs, <i>cont'd if needed</i> Questionnaire design and measurement concepts | C&R Ch 7 (p. 130-138 only) C&R Ch 5 | |
| | May 27 | Quasi-experiments | C&R Ch 11 Lab Guide Ch 2 | **Midterm Exam** *Lab 2 (TCPS due) |
| 4 | June 1 | Complex designs Cost/benefit analyses in research design | C&R Ch 10 | *iPeer ratings due |
| | June 3 | Describing data | C&R Ch 12 Lab Guide Ch 3 | *Lab 3 |
| 5 | June 8 | Inferential statistics | C&R Ch 13 Lab Guide Ch 4 | *Lab 4 |
| | June 10 | Additional ways of studying people: Observation, case studies, testimonials | C&R Ch 6 Lab Guide Ch 5 | *Lab 5 |
| 6 | June 15 | Interpretation & generalization of research | C&R Ch 14 | |
| | June 17 | Review and synthesis: The big picture! | | *iPeer ratings due *Submit APA paper by 11:59 tonight! |

Notes: C&R = Cozby & Rawn Research Methods textbook

Inspiration for this syllabus and selected learning appraisals came from brilliant models by Drs. Lara Aknin (SFU), Adam Carle (U of North Florida), Elizabeth Dunn (UBC), Vicki Casella (SF State), Catherine Rawn (UBC), and Jennifer St. Onge (Regina Qu'Appelle Health Region).