ANALYSIS OF BEHAVIOURAL DATA

PSYC 218 Sections 001 and 002 – Winter 2023/24 Term 2 Syllabus Version 1.3: January 11th 2024

Where?

Class meetings

Buchanan A-103. Click for Map and Room View. The entrance depicted here is to the 2^{nd} floor. Our



classroom is on the 1st floor by StirItUp Cafe.

Land Acknowledgement. Throughout this course we will gather at UBC Vancouver's Point Grey Campus, which is situated on the traditional, ancestral, and unceded, territory of the hənqəminəm speaking Musqueam (xwməθkwəyəm) people, who have been learning and living here for thousands of years. Learn more about Musqueam here.

When?

Mondays, Wednesdays, and Fridays (except Spring Break)

Section 1: 9-9:50 Section 2: 10-10:50 See Course Schedule for detailed dates. I'll be masking, at least initially.

Why?

To build a community of scholars who learn more, with more complexity and depth than what we can each learn alone. Your engaged attendance is important.

Why? About 100 years ago, colonialism was baked right into the discipline we're studying and into the institution that brings us here on this land. What does this mean for us today? There are no easy answers, except one: It's our responsibility to continually open ourselves up to learning.

I'M READY! HOW DO I START?

- 1. Read the rest of this document.
- 2. Complete the *Week 1 Module* on Canvas.
- In Canvas, check your Account >> Notification settings to ensure you receive weekly Announcements.
- 4. Commit to coming to all classes in your schedule.

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MEET THE TEACHING TEAM



Dr. Catherine Rawn (she/her), Professor of Teaching

I welcome you to come chat with me before or after class. Drop in office hours Wednesdays 2-3 and Fridays 3-4, my office Kenny 2523 (with mask) for

discussions about the course and/or how it fits in your life. Other options: general questions to Canvas Course Q&A Discussion Board, and for questions specific to you, message me on Canvas Inbox (M-F, approx. 8-4) rather than email. Here's a link to provide me with anonymous feedback, anytime. For more about me see my website.

TEACHING FELLOWS. TFs are here to help you learn and help me to evaluate your learning. They will lead SPSS Practice Labs, grade, and respond to questions. You can reach out to anyone, but your Learning Community will include one of our TF's names. Please check in with them first.

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WHAT IS THIS COURSE ABOUT?

Fundamentally, this course is about understanding people. How are we going to do that? In a way you might not have explored much before: by learning about statistics. Statistics are tools that some researchers in psychology and other disciplines use to gain insight into how and why people do what they do. No more, no less. Statistics aren't magic. They don't tell us exactly what's going on (but they can give us insight, depending on our interpretations). Statistics are certainly *not* something to be feared. Yes, there are calculations and calculators and computers involved. But those are just about getting the numbers. What's really important is how we interpret them, so that we can evaluate hypotheses and (hopefully, cautiously) learn some things about some people.

Keep in mind that this course is an *introduction*. We're not going to fully learn everything about statistics. Sometimes the ideas we'll be learning about might not seem relevant to understanding behaviour, but they're laying a foundation that you can take with you into the world and into future courses. For many people, this course will present quite a challenge. Prepare to put in the work, don't fall behind, seek help when you need it, and you'll find yourself off and running toward developing statistical literacy and understanding people a bit better. You might even learn something about yourself in the process!

COURSE GOALS

I wrote these course goals to provide direction for all our learning activities and assessments (see Constructive Alignment for more on this approach to course design).

If you are willing and able to meet the requirements, by the end of this course, you will be able to...

- compare, contrast, and critique descriptive statistics (including effect size) versus inferential statistics (Null Hypothesis Significance Testing (NHST) method).
- calculate, by hand and using computer software, a variety of statistics commonly used in psychology (e.g., correlation, regression, z-scores, t-tests, ANOVA).
- 3. choose and apply the appropriate statistic to analyze a dataset, when provided with a study's design and a researcher's purpose.
- 4. interpret what the statistics you calculate mean about the variables and the hypothesis.

- 5. evaluate others' interpretations of statistical analyses.
- 6. discuss the strengths and weaknesses of various statistical tests, and the NHST framework broadly.
- 7. define and discuss the relationships among major statistical concepts (e.g., alpha, effect size, power, sample size).
- 8. appreciate the value of developing statistical literacy.

MATERIALS NEEDED

You'll need a few materials to set yourself up for success. Please buy the textbook, lab guide, and CogLab through the UBC bookstore to ensure correct access. Always save your proof of purchase. If you purchase elsewhere or second hand, I will not be able to help you fix/integrate your access. See below for financial hardship information.

Essential (e-)Books

1. TEXTBOOK with Achieve Access – needed Week 1 especially for math refresher resources. Nolan, S. A., & Heinzen, T. E. (2020). Statistics for the Behavioral Sciences, (5th Ed.). New York, NY: Worth. Please begin by signing up for free access until Jan 22, through the link in the Canvas Module called: "Register and access Nolan & Heinzen...." This will get you started, and enable you to try out the first LearningCurve quizzes and other resources. Please purchase through the UBC bookstore to enable your access to Achieve and the eBook using the link on Canvas. (Bookstore: Digital only \$67.75, Print + Digital \$115.33).

Note: This text is different from most other sections of this course. You cannot use a different book. I recommend the loose-leaf option (which comes with 6 months of e-book access too) for easier reference during the course and beyond.

FINANCIAL HARDSHIP? Please sign up for free access, then contact me. (As a first-generation undergrad who relied fully on student loans, I understand. Please reach out!)

2. LAB GUIDE – needed in Week 4. Cuttler, C. (2020). A student guide to SPSS, (3rd Ed.). NJ: Kendall Hunt. (Digital format from the bookstore, \$69.80; or used print version. Do not buy a used access code.) This guide will be indispensable when it comes to completing the assignments throughout this course, including software screenshots and detailed tips. May also be helpful for future work.

Essential Sites, Software, and Technology

- A computer with some space for software downloads (below). Chromebooks and tablets will encounter difficulties.
- **4.** Our PSYC 218 001/002 2023W2 Canvas Course, on canvas.ubc.ca. All resources such as modules, assignment details and submissions, class recordings, Gradebook, Weekly Announcements. Use the Canvas Inbox to reach me. **FREE.**
- 5. iClicker Cloud. Follow the link within our Canvas course to set up an account (if you don't already have one) and link to your section of our course. Please use the same first and last name as appears in Canvas. Find more instructions in the Student Guide for UBC. Will be used every class period. FREE.
- 6. COGLAB 5.0 needed by end of Week 2 is the tool we will use to generate Assignment data (historically all Sections used this; this year only my sections are—long story, come see me if you want it!). An access code is available for purchase from the Bookstore (follow instructions on Canvas). Please use the same first and last name as appears in Canvas. \$25.45
- 7. IBM SPSS Statistics Software needed in Week 4. You must complete assignments using SPSS, which is available for free from <u>UBC IT</u>. Download and install as soon as possible to allow time for challenges. FREE.
- Microsoft Word Software not needed until Week
 You must complete assignments using MS Word (.pages files don't work). Please download MS Office 365 for free from UBC IT. FREE.
- 9. In class tools: Laptop or mobile device, loaded with the ebook and iClicker, pen/pencil and paper, a <u>basic calculator</u> that can quickly do squares and square roots (helpful for quick calculations during class and tests). <u>An example calculator</u> for \$5.49.

FITTING THIS COURSE IN YOUR DEGREE

Pre/Co-Requisites. This course requires that you have already successfully completed PSYC 217 Research Methods and declared a major in Psychology, Cognitive Systems, or Speech Sciences. It is a requirement for the BA Psychology major, and is a prerequisite for Honours in Psychology, as well as advanced statistics classes in our department (e.g., PSYC 303 and PSYC 359).

Considering Withdrawing? This is a very demanding course, no matter what year, term, or format in which you take it. If you find yourself unable to handle this course at this time, I encourage you to talk to me. Check these dates to find out whether withdrawing will affect your transcript.

LEARNING ASSESSMENTS (YOU HAVE SOME CHOICE HERE!)

These assessments are designed to help you achieve the learning outcomes—and to help me measure that learning. In line with <u>Self-Determination Theory</u>, assessments are structured to support your experience of *autonomy* (e.g., flexible assessment values), *competence* (e.g., weekly learning activities, REC, LearningCurve quizzes, tests), and *relatedness* (e.g., inclass learning activities).

To support your *autonomy*, you may decide the value of particular assessments in the calculation of your final grade (Rideout, 2018). Everyone starts out on Pathway 1, but you have a choice. You can opt out of the LearningCurve quizzes (Pathway 2), or treat all in-term learning assessments as low stakes in preparation for a high-stakes final exam worth half your grade (Pathway 3). Read the following information about these assessments and deadlines, and choose the Pathway that is right for you this term. To choose Pathway 2 or 3, send me a message using Canvas Inbox before 11:59pm on Monday 22 January 2024. No changes will be permitted after that date.

Learning Assessments Everyone completes 1-7. Pathway 2 excludes #8.	Due Date(s)	Pathway 1 (Default)	OR Option Pathway 2 (Fewer deadlines)	OR Option Pathway 3 (Low stakes practice, High stakes final)
1. Assignments SPSS Assignments (due dates listed here and in Course Schedule), plus Dataset Contributions (due dates listed in Course Schedule)	1. Friday February 9 (4%) 2. Wed February 28 (4%) 3. Friday March 15 (4%) 4. Friday March 29 (4%) 5&6. Mon Apr 15 (8%)	24% (All 218 Sections Requirement)		
2. Research Experience Component (Human Subject Pool Participation or Library Option)	Complete by last day of classes (or 10 days prior if library option).	3% (All 218 Sections Requirement)		
3. In-Class Learning Activities (iClicker)	Every class	2% (Engaging in class will be essential for everyone)		
4. Test 1	Monday January 29	12%	12%	5%
5. Test 2	Friday March 1	12%	12%	5%
6. Test 3	Wednesday March <mark>27</mark>	12%	12%	5%
7. Final Exam (Cumulative)	TBD (April 12-27)	30%	35%	50%
8. Achieve LearningCurve Quizzes	14 short adaptive quizzes throughout, as assigned in <i>Achieve</i>	5%	0%	6%
Total		100%	100%	100%

1. Assignments (6 x 4%)

What do I need to do?

Each lab assignment has two components that contribute to your grade. Note that Assignments 5 and 6 will be combined at the end of the course.

- 1. **Contribute data to the class dataset**. Spend 10-30 minutes completing a specific online experiment in CogLab or a survey, as listed in the Course Schedule and linked on Canvas. To sign up for CogLab, please see detailed instructions in the Week 1 Module on Canvas.
- 2. Complete Lab Assignment. The assignments will require you to analyze and interpret the data from one of the CogLab or Surveys our class has generated. All assignments will be posted on Canvas, where you will submit them.

Why are you asking me to do it?

To inspire and measure your learning of Course Goals 1, 2, 3, 4, 7.

Assignments form the heart of all sections of PSYC 218. Like in all sections of this course, assignments are spread across the term will give you practical experience analyzing data using SPSS (a commonly used statistical software package; see Davidson et al., 2019) and reporting the results.

How should I prepare?

<u>Review</u> the Student Guide to SPSS and <u>participate</u> in In-Class SPSS Practice Labs. Guide chapters provide detailed information about how to perform all the SPSS functions you will need for the assignments, including screen shots from SPSS. Five times during the term, class time will involve hands-on demonstrations of how to use SPSS for the upcoming assignment, as well as a sample set of questions. These resources will provide you with everything you need to succeed.

Although you may ask for assistance, you must complete the analyses and write-ups on your own. You may not share your work with other students or use another student's work. Please see page 12 for further discussion of Academic Integrity including Generative Artificial Intelligence (e.g., ChatGPT).

Dr. Rawn, how will you support my success?

I merge and analyze your data, and then create each assignment based on those data from our current class, as well as a detailed answer key for our Teaching Fellows to use to score your answers. I have created space in the course for our Teaching Fellows to lead you in SPSS Practice Labs. I post the assignment after the corresponding Practice Lab, for you to complete on your own time. I work with the Teaching Fellows on the Practice Labs to ensure they prepare you well for the assignments.

You are encouraged to meet with your Teaching Fellows during their office hours if you require assistance with the assignments. You may also use the discussion boards on Canvas to discuss with your Teaching Fellows and peers any issues you encounter while completing the assignments.

I have prepared for you a **Re-grade request process.** If you feel strongly that a question on any test or assignment was graded unfairly, you may submit the <u>Re-Grade Request Form</u>. To qualify, you must submit the form within 2 weeks of the date grades were posted on Canvas. I will consider your request carefully and will respond via email as soon as possible. Re-grading may result in an increase or decrease. That re-grade is final.

How do I submit? What do I do if I miss a deadline (or know I have to miss an assignment deadline)?

- 1. CogLab or Survey Data. These are always due on Fridays at the end of day. Check the Course Schedule and Canvas settings for specific dates, links, and instructions. Although there will be some flexibility with the deadlines, if they are not completed before I export the data to create the assignment, then you will receive a 1% deduction. Bottom line: don't stress the precise date of completion, but don't leave them longer than about a week to be safe.
- 2. Assignments. You will have about 1 week to complete each assignment on Canvas. Check the Course Schedule for specific due dates. I'll give everyone one day grace with no questions asked and no penalty. You don't need to ask for that day, just go ahead and submit your work. (The Canvas system will automatically label it as "late" but that doesn't mean I will apply a penalty.) After that, you will need to use a late pass you don't need to ask for these, I'll just apply them as needed. You will receive TWO 1-Day-Late Passes. Use them all at once (2 days for one assignment), or separate (e.g., 1 day for 2 assignments). After those two days have been used, standard 10% per day deductions will apply (except in emergency circumstances with submission of self-declaration form or in-term concession from Arts Advising). Once grades for the rest of the class have been released, late assignments will not be accepted. You take a zero and move on.

2. Research Experience Component (REC) (3%)

What do I need to do?

Note that, as in all sections of PSYC 217 and 218, REC is required. There are no bonus HSP points as in some other courses.

From the HSP Team: Most students will choose to earn their research experience component by spending three hours participating in psychology studies (worth 1% point for each hour) through the Department of Psychology's Human Subject Pool (HSP) system.

As an alternative to participation, you may complete a library writing project. Such projects consist of reading and summarizing 1) the research question, 2) the methods and 3) the results (in written form) of a research article from the peer reviewed journal *Psychological Science*. Any student who is suspected of plagiarism will, at a

	minimum, not be granted credit, and their course instructor will be notified. Further action may be taken at a departmental or university level.
Why are you asking me to do it?	The REC is designed to help you (and all PSYC 218 students) 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.
How should I prepare?	You can locate, create an account, and sign up for studies by going to https://hsp.psych.ubc.ca . Please register in the system by the end of the first month of classes to have the opportunity to earn your first ½ hour credit with a brief online survey that will increase your eligibility for more studies. Once registered in the system, you will be able to browse through and select which studies you wish to participate in, sign up for an available timeslot, and confirm your accumulated credits afterward. At the end of the last day of class for the term, the subject pool is closed. At that point, you will no longer be able to receive credits. I strongly urge you to participate in and confirm your credits long before the last week of class since many studies will not offer timeslots near the end of the term and you may be locked out before allocating your credits to your desired course.
	Library option: Summaries must be submitted no later than 10 days before the end of classes . You are to submit your article <u>and</u> your summary to turnitin.com. If you don't have a turnitin account already (from a previous course), you will need to create a user account in Turnitin. For the library assignment the class ID is 41815379 , class name is "HSP W2 2023-2024" and password is "Research".
	Further instruction on how to use the HSP online system, and requirements for the library option, can be found at https://psych.ubc.ca/undergraduate/opportunities/human-subject-pool/ in the document entitled "HSP Participant Information Winter Term 2 2024."
Dr. Rawn, how will you support my success?	I'll remind you periodically in my Weekly Announcement. Then, at the end of the term, I receive a class list from the HSP administrative team with the corresponding number of credits to assign. Assuming you have entered your name and Student ID number correctly on the Sona system, and allocated your credits to the correct section, I will be able to add your points before finalizing grades.
What do I do if I sign up for a study and can't make it?	Be sure to cancel in advance through the Sona system, or you may be blocked from participating in more studies. For details, please see the No-Show Policy on page 8 in the document entitled "HSP Participant Information Winter Term 2 2024" available here: https://psych.ubc.ca/undergraduate/opportunities/human-subject-pool/

3. In-Class Learning Activities			
What do I need to do?	Come to class on time and ready to engage with the material, your peers, and the Teaching Team. Submit responses using iClicker, as prompted in class.		
Why are you asking me to do it?	To inspire and measure your learning of all eight Course Goals. To motivate attendance because I believe coming to class is essential for your success.		
How should I prepare?	Set your alarm early enough to arrive on time. Bring materials (iClicker Cloud access on a device, pens/pencils and paper). Keep up with the readings so you are ready to engage and build from what you learn (LearningCurve Quizzes can help with this).		

Dr. Rawn, how will you support my success?

While planning each lesson, I thoughtfully write Learning Objectives that act as our compass for the day's lesson (and your study guide for later on), and I create activities (e.g., mini-lectures, guiding questions, worksheets, examples) to help you learn.

Each class morning, I will arrive early to class to set up any visual aids and iClicker, and to welcome you and your peers. I will lead you through the lesson plan responsively and with enthusiasm, and, when appropriate adapt it spontaneously in response to what I am learning from you.

Because of the nature of this course, and based on feedback from students since before the pandemic, I have set up lessons to be automatically recorded using the Panopto system built into the classroom. Assuming the tech cooperates, they will be available for review via a link on Canvas. **Recordings are not for sharing beyond our course's Canvas home.**

You can earn up to 2 points per class for iClicker (1 point for responding to at least 75% if questions, and 1 point for a correct answer if applicable). At the very end of the term, I will convert the total score out of 2 (e.g., if you submit 18/36, you'll receive 1/2).

What do I do if I miss class?

There isn't a way to make up the iClicker points, logistically. So I will provide everyone with a week's worth of *grace space*: You can still receive full marks if you miss up to 3 classes.

If you must miss class, I recommend booking 50 minutes in your calendar to "attend" using the video. Have all handouts ready, and respond to all the questions I ask the whole class. Give yourself permission and time to fully engage in the activities and exercises on your own, as if you were right there in class. You'll get at least some of the benefits! Then, reach out to someone in the class for a discussion to see if you're on the right track (or perhaps they'd share notes with you, but a discussion might be more fruitful for both of you). Then, come see me in my office hours if there's anything further you want to follow-up on.

4, 5, 6. Tests 1, 2, and 3

What do I need to do?

Each test will be held in class, on paper, with a mix of multiple choice and short answer questions totaling approximately 25 points. Answer the questions independently, by hand for short answer questions or on a Scantron sheet for multiple choice questions. Bring a basic calculator, pencils, and erasers. You will be provided with an unlabeled formula sheet that lists the formulae we have used but without the left side of the equation (e.g., missing z = 0, so you'll need to recognize the correct z = 0 equation).

Why are you asking me to do it?

To inspire and measure your learning of Course Goals 1-7.

How should I prepare?

Come to class and engage in all class activities, actively read the textbook, and complete the assignments. By "actively read" I don't mean passively resting your eyes on the words; instead, do the exercises and follow along with the calculations and interpretations. Test yourself while you read. Your "study guide" includes each class period's learning objectives (LOs), key terms and chapter headers from the textbook, practice questions at the end of each chapter and in *Achieve* (LearningCurves and Practice Quizzes).

Tests require thorough understanding of course material, including the ability to apply and integrate concepts across relevant chapters/units. You will be challenged to push beyond memorization of facts and to integrate and apply course material. Tests are not cumulative (in other words, they test only the material since the last test, but may out of necessity draw on understanding of earlier concepts).

Dr. Rawn, how will you support my success?

I design all learning activities in class and the assignments to help prepare you and give you practice for the tests, starting from the Learning Objectives. I also carefully chose a textbook that would help to support and guide us as you learn to understand, conduct, apply, and interpret basic statistical techniques. I have embedded tips for studying throughout this syllabus and the course. I will hold regular office hours in addition to class time, where you can discuss content and study strategies. I am happy to support you with any accommodations through the Centre for Accessibility (remember to pre-register your test with them at least 10 days prior).

As for the tests themselves, I will do my best to write clear questions that follow from the Learning Objectives and are appropriately challenging (for all 200 of you!). I will prepare extensive grading keys to support our TFs in grading, and conduct statistical analyses on the test questions, adjusting as needed. I will tell you about any adjustment decisions in an Announcement.

I have prepared for you a **Re-grade request process.** If you feel strongly that a question on any test or assignment was graded unfairly, you may submit the <u>Re-Grade Request Form</u>. To qualify, you must submit the form within 2 weeks of the date grades were posted on Canvas. I will consider your request carefully and will respond via email as soon as possible. Re-grading may result in an increase or decrease. That re-grade is final.

What do I do if I miss a quiz (or know I have to miss a quiz)?

Review the Faculty of Arts <u>self-declaration form</u> for <u>in-term concession</u>. If you *do* qualify or you are *not sure*, submit the form using Canvas Inbox to me as soon as possible (if you have trouble attaching the file, email it to cdrawn@psych.ubc.ca, and then message me in Canvas Inbox to let me know). There will be one make-up quiz date per quiz, held in person with a Teaching Fellow. You are expected to act honestly and avoid communicating with other students about the quiz before writing it. If you *do not* qualify for in-term concession, you take a zero and move on (there are lots of points left!).

7. Final Exam What do I need to The final exam will be scheduled by the Registrar during the exam period for 2.5 do? hours. It will be held in person, on paper, with a mix of multiple choice and short answer questions approximately 2.5 times longer than the Tests. Answer the questions independently, by hand for short answer questions or on a Scantron sheet for multiple choice questions. Bring a basic calculator, pencils, and erasers. You will be provided with an unlabeled formula sheet that lists the formulae we have used but without the left side of the equation (e.g., missing z = 0, so you'll need to recognize the correct z equation). To inspire and measure your learning of Course Goals 1-7, especially those that Why are you asking me to do it? integrate across topics. How should I The final exam will test your thorough understanding of the entire course's material, including the ability to apply and integrate concepts across chapters/units. You will be prepare? challenged to push beyond memorization of facts and to integrate and apply course

material. The final exam *is* cumulative, meaning that it deliberately draws on topics from the entire course (with emphasis on later topics).

You've been preparing all term, so consider going back to the beginning. Review your notes from class, and from the textbook. As you do so, make sure you *practice* the exercises and follow along with the calculations and interpretations. Test yourself as you go, perhaps even with a timer. Use the in-class Learning Objectives as your priority guide. Re-do the assignments and SPSS labs.

Dr. Rawn, how will you support my success?

I have designed the Learning Objectives, in-class exercises, assignments, and Tests as direct practice for this final exam, and have set up LearningCurve and Practice quizzes for you in Achieve. See this section for *Tests 1, 2, and 3* for more details.

What do I do if I miss the final exam?

Apply for Standing Deferred Status with the Faculty of Arts (see <u>Academic Concession</u>). If Arts Advising determines that you <u>do</u> qualify, there will be one makeup exam date in Summer 2024 as scheduled by the Registrar. You are expected to act honestly and avoid communicating with other students about the exam before writing it. If you <u>do not</u> qualify for Standing Deferred Status, you take a zero on this exam and move on.

<u>University policy</u> dictates that if you have 3 or more 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 give the instructor of the second exam one-month notice.

8. Achieve LearningCurve Quizzes

What do I need to do?

Complete all multiple-choice style quizzes I have assigned in *Achieve*. Each quiz (for Chapters 1-12, 15, 16) will take approximately 30 minutes, but that might be shorter or longer depending on how deeply you engage with the material. The system is set to let you do the quiz up to 5 times for practice, and each time will be different. You only need to complete it once for the credit.

I have set the deadlines to match our Tests (e.g., Chapters 1-5 are all set as due the night before Test 1), plus a two-week extension. I suggest you space them apart to complete about one per week, as we cover the topics in class together.

To access the quizzes, follow the link from our Canvas course. When you sign in the first time, the system will give you the option to be anonymous. *Please use this anonymous option only if absolutely essential*; it makes assigning your marks to you logistically difficult for me (it's not automatic).

Why are you asking me to do it?

To inspire and measure your learning of Course Goals 1, 2, and 4.

To help you stay on track and keep testing yourself. It's easy to fall behind on textbook readings. If you think you could benefit from a little more structure, practice, and accountability, this option is for you!

My understanding is that these quizzes focus on conceptual understanding but (unfortunately) not calculations. The algorithm adapts questions as you go, depending on whether you answered the last question correctly or not. I also believe it asks you to rate how confident you are, to help improve your metacognitive skills (i.e., how aware you are about what you know – and don't). Research shows greater long-term retention with multiple testing opportunities (Roediger & Karpicke, 2006) and enhanced meta-cognitive skills (Cromley & Kunze, 2020), making this a great investment in learning.

How should I prepare?	You can begin by reading the chapter, or you can just dive right in to the quiz and learn as you go, back and forth between the questions and the sections of the ebook. The automated system chooses the next question depending on your previous answers to help you scaffold your learning, so you don't necessarily need to pre-read.
	After completing the quiz, it's a good idea to go back and skim the whole chapter and check the key terms, to make sure you caught all the relevant material.
	What if I want more practice questions, especially calculations? Achieve also offers Practice Quizzes for each chapter to help give you some more practice questions to use for calculations. There are also practice questions at the end of every chapter in your textbook, and Appendix C provides answers to half of them. Find a study group to discuss the rest!
Dr. Rawn, how will you support my success?	I have set up the quizzes in Achieve, and arranged for financial need access with the publishing company so that no one is excluded from this learning opportunity for financial reasons.
	Throughout the course I will remind you of the LearningCurve quizzes in weekly Announcements and in Your Complete Weekly Guide. At the end of the course, I will export completion scores, and weight them accordingly toward your grade.
What do I do if I miss a deadline?	Complete the LearningCurve quiz as soon as possible after the deadline. I have set the system to enable a two-week extension for those who need it—you do <i>not</i> need to ask for this. I will just accept it as completed if it is done on the due date +14 days.

BUILDING OUR COMMUNITY: SUPPORTS, SAFETY NETS, AND ADDITIONAL POLICIES

Support through Personal Emergencies and Challenges

If you are sick, it is important that you stay home. Complete a self-assessment for COVID-19 symptoms here: https://bc.thrive.health/covid19/en. If you experience a personal emergency during this time, please seek the resources and support you need to cope with that emergency. Check https://students.ubc.ca/health, and reach out if you don't know how or which resources to access. I'll help as best I can.

Take care of yourself first. Then, reach out to me to check in about the course. I will bring patience, flexibility, and compassion as we work on a solution. You don't need to tell me what has happened. But at this point we can figure out if the built-In safety nets are sufficient accommodation; otherwise, I'll ask that you review the in-term concession criteria available here, and complete the Self-Declaration form if applicable. In more complex or longer-term affecting situations, please seek Arts Academic Advising.

Check out these support resources before an emergency. See https://students.ubc.ca/health/health-topics/understanding-stress for ways to care for yourself. See also the Arts Student Support portal for wellness, academic, and broader support: https://www.arts.ubc.ca/student-support/. And join the Psychology Student Guide community today!

What will happen if the Teaching Team experiences a personal emergency? It is possible that I or a TF will experience a personal emergency during this course. I will communicate with you immediately and as often as I can, using the Announcements feature in Canvas. We will invite you to continue as much as possible with the scheduled learning activities, and we will communicate with you any modifications (e.g., to availability, timeliness of feedback) that are impacted. We will ask for your patience, flexibility, and compassion, as well as continued dedication to your and classmates' learning during that time.

Support for Students with Accessibility Needs. "The Centre for Accessibility facilitates disability-related accommodations and programming initiatives designed to remove barriers for students with disabilities and ongoing

medical conditions." If you have ongoing need for accommodation, please contact UBC's <u>Centre for Accessibility</u>. Once registered there, please ensure you register each of our tests that you are writing. I'll be happy to work with you on accommodations. If you are in the process of registering at the Centre, please come to office hours to work out a plan.

Supporting Each Other in our Shared Spaces

We are coming together to do this work of learning. We hold space with each other in our physical classrooms. Additionally, our Canvas home, including any links we add that connect in or out, is the space we hold for each other for this purpose of learning. These shared learning spaces are governed by and shaped by all of us.

It is my hope and intention that you and every single student in our class will feel a sense of belonging (thereby supporting your experience of *relatedness*). We will engage as a "large" group, with class activities aimed at connecting all of us as we learn. Because our class is so large (about 200 people across the two sections), you have been randomly assigned into one of **8 Learning Community (LC) groups of about 25 people**, all of whom are officially registered in your section, each with a Teaching Fellow (TF) as your key contact. Your LC will be your go-to group for discussions, and your TF will be there to support you. We will begin LC groups right away, making adjustments as our class roster shifts early in the term. These are intended to support your *relatedness* as we build our community and as you develop *competence*. Your group appears in your *Groups* tab on Canvas, and each has its own space for discussion.

Option: If you would like an online space within Canvas or Microsoft Teams for an additional self-chosen group (e.g., for studying; see also Academic Integrity section on collaborative studying), let me know and I can help you set that up.

In order to support all of our classmates, regardless of their personal circumstances, we will be recording all classes. Recordings are *not for sharing beyond our course's Canvas home* (see Academic Integrity, below). If you have legal or other serious concerns about having your identity recorded in this way, please feel free to come to me to discuss options.

One of the first things will we do together is set class engagement guidelines (supporting your experience of *autonomy* and *relatedness*). This <u>classroom guidelines</u> resource, as well as the UBC Values statement below, help us prepare for how we may want to engage together. Think about how you want to us to engage respectfully together, and what that looks like.

I endorse UBC's Values Statement, and invite you to do the same:

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 and cultural observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions. Details of the policies and how to access support are available here: https://senate.ubc.ca/policies-resources-support-student-success. (from Senate Policy: V-130; emphasis added)

Supporting Learning with Academic Integrity

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 our own and others' contributions 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 their ideas. APA style gives us a formal way to indicate where our ideas end and where others' begin. But academic integrity goes well beyond formal citation. Welcome to the academic community. You are expected to act honestly and ethically in all your academic activities, just like the rest of us.

Make sure you understand UBC's definitions of <u>academic misconduct</u>, potential <u>consequences</u>, and expectation that students must clarify how <u>academic integrity</u> applies for a given assignment. *Please ask if you're not sure*. (While you're checking out the calendar, you might want to check out the "<u>Student Declaration and Responsibility</u>" statement you agreed to when you registered.)

What does academic integrity look like in this course? At any time: if you are unsure if a certain type of assistance is authorized, please ask. If you have a need that is unmet by existing course materials, course structure, and/or our learning community members, please ask.

DO your own work. All individual work that you submit should be completed by you and submitted by you. All assessments, large and small, are designed to help <u>you</u> learn statistics. It is *unacceptable* to use a tutor or editor (paid or unpaid) without my permission to revise, correct, or alter your work, because your submission is no longer your own work. It is *unacceptable* to buy/sell/swap/share assignment questions or answers on any platform. It is *unacceptable* to misrepresent your identity by using someone else to complete any portion of a course (e.g., comment on a discussion board, complete a quiz question). It is *unacceptable* to help someone else cheat.

The use of Generative Artificial Intelligence (GenAl, e.g., ChatGPT) tools is fairly new ethical technological territory. Generally, I don't think it's a great idea to use GenAl when you are preparing your assignments for submission in this course, as it removes the learning opportunity for your own brain, and can challenge whether the work you are presenting is your own. However, it doesn't feel quite right to ban it either. If you choose to use ChatGPT (or a similar tool) to get ideas and/or partial answers for an assignment and/or to generate any text for a draft or final version of any part of an assignment, you must declare that you have used it, with a couple sentences describing the extent to which it was used, and you must attach any generated text from this tool. You will not be penalized for using this tool, but the generated text may be used in grading decisions (e.g., your original contributions may be evaluated rather than that which was generated by AI). Failure to fully declare the use of this tool will be considered unauthorized (academic misconduct).

AVOID collusion. Collusion is a form of academic integrity violation that involves working too closely together <u>without authorization</u>, such that the resulting submitted work gains unfair advantage over other students because is a measurement of the *group/pair/others'* understanding rather than the *individual* understanding (definition adapted from <u>OpenLearn</u>). For example, collusion on a test includes working together to write answers or answering someone else's question in a chat platform. See more examples of collusion <u>here</u>. *Preparing* to individually complete an assignment or test by *studying together* (e.g., discussing concepts, quizzing each other and giving feedback on each others' answers) doesn't count as collusion. In this course, **all your submitted work should be** *individually completed*; you are presenting your own understanding of the work you may have previously discussed with others.

Can I work with a classmate to co-create study notes? Yes, you can create your own original collaborative notes (but see below). I recommend using the features in Canvas groups to ensure your work remains protected. Send me a message using Canvas Inbox, and I'll create a Group just for you. That will allow you to upload and share notes, and to work collaboratively on Pages (see this site for an introduction to these features). If using Microsoft Teams, see this site for information and let me know if I can help. Once you've decided on a platform, I also recommend starting your collaboration with a written agreement that addresses integrity issues, such as these: Who else can see/use/contribute to these notes? How will we ensure we are not violating copyright?

DO NOT share materials provided for you to use in this course. We are working hard to provide all the materials you need to succeed in this course. In return, please respect our work. All assignment instructions, quiz questions and answers, discussion questions, announcements, PowerPoint slides, audio/video recordings, Canvas modules, and any other materials provided to you by the Teaching Team or in the textbooks are for use in this course by students **currently** enrolled in PSYC 218 Sections 1 and 2. It is *unacceptable* to share any of these materials beyond our course, including by posting on file-sharing websites (e.g., CourseHero, Google

Drive). It is *unacceptable* to copy and paste sentences from the textbook (e.g., definitions) into for-profit software (e.g., Quizlet, ChatGPT) for use in studying. Respect the Teaching Team and textbook authors' intellectual property, and follow copyright law.

Can I share your materials with a classmate who is struggling and trying to get caught up? No, not directly. Please send them the link to where they can find the material in Canvas, after logging in with their CWL. Invite them to reach out to the Teaching Team for more support (e.g., financial need access to the textbook).

DO acknowledge others' ideas. Scholars build on the work of others, and give credit accordingly—this is a quality of strong academic writing. In PSYC 217, you learned and practiced ways to acknowledge others' work. Citing our sources in both formal and informal ways will be appropriate, depending on the submission. For example, much of the way I think and write about academic integrity has been influenced by the work of Dr. Laurie McNeill, including her excellent wiki that curated many of the above links, as well as Dr. Sarah Elaine Eaton, including her webinar series. (See what I just did there? In informal writing, such as discussion posts, we can use links and embed references to our fellow humans who informed our thinking. They're my ideas and written in my own words, but I'd be thinking differently if it weren't for my encounter with their scholarly work. When we write more formally, such as for the Research Report in PSYC 217, we psychologists use APA style conventions to cite and reference.)

DO learn to avoid unintentional plagiarism. Visit the Learning Commons' guide to academic integrity to help you organize your writing as well as understand how to prevent unintentional plagiarism, which can be challenging when first learning to paraphrase. Visit http://learningcommons.ubc.ca/resource-guides/avoiding-plagiarism/. An example tip: Do not copy and paste text from other sources, including other people's work, even in a draft. It's easy to unintentionally misrepresent those words as your own in a later draft (which would still qualify as plagiarism). *Please feel free to ask (have I said that enough?*).

Supporting Your Success and Well-Being with Safety Nets and Built-in Flexibility

I trust that when you *can* make deadlines on time you *will* make deadlines on time. Several safety nets are built in to the course for everyone to use without question, explanation or appeal, thereby supporting your experience of *autonomy* and privacy. Please see each learning assessment's description for what to do in case of missed deadlines. If you need more support beyond this, please reach out. I will offer patience, flexibility, and compassion; I expect honesty and flexibility in return.



Psychology Department Policies

Grading. 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. The average grade in 100- and 200-level Psychology classes will be 72 for an exceptionally strong class, 70 for an average class, and 68 for a weak class, with a standard deviation of 14. The

corresponding figures for 300-level classes will be 75, 73, and 71, with a standard deviation of 13. 400-level classes and selective-entry lower-level classes in the BSc and Honours programs (e.g., PSYC 277, 278, 312, 370, 371, 349, 359, 365) will be 82, 80, and 78, with standard deviations of 8-12. 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. Students receive both a percent and a letter grade for this course. At UBC, they convert according to the key below:

A+	90-100%	B+	76-79%	C+	64-67%	D	50-54%
Α	85-89%	В	72-75%	С	60-63%	F	0-49%
Δ_	80-84%	R-	68-71%	C-	55-59%		

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. All materials (term papers, lab reports, etc.) that students submit for grading will be 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 originality that flag instances of matching text suggesting possible plagiarism; instructors receive copies of these reports for every student in their classes. During exams, the instructor and invigilators reserve the right to move students in their seating arrangement with no explanation provided.

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 Chapter 5 in the UBC Calendar (http://students.ubc.ca/calendar).

DR. RAWN'S POSITIONALITY STATEMENT

Why? Understanding positionality is about identifying the social roles and lived experiences that shape the perspective each of us uniquely brings to learning, research, teaching, and life more broadly. I share with you here a sample of my working understanding of who I bring to you in this course, while we explore some aspects of how new knowledge is created in psychology. Sharing this information makes me feel vulnerable, but it also feels true and transparent—part of what it means to be taking this course with me this year. I recognize the power I have as a Professor of Teaching, with tenure, to model my positionality so openly. I invite you to consider your positionality in relation to what we are learning about research in psychology.

I'm a white settler, descended from Scottish, British, and Northern Irish immigrants (in the 1800s and 1900s), and German Palatine refugees (in the 1700s). I was born and raised in Guelph Ontario, unknowingly on the traditional territory of the Mississaugas of the Credit First Nation of the Anishinaabek Peoples. My extended family is large and complicated. I was the first in my close family to attend university, and although we always had food we experienced great financial hardships. I attended St. Jerome's (Catholic) University within the University of Waterloo, where I majored in Psychology, minored in Human Resources Management, and met my future husband. I ended up at UBC, on Musqueam territory, for graduate school in social psychology, thanks to a long history of excellent teachers who encouraged and taught me how to keep pursuing education. My commitment to teaching grew from a desire to help others learn things I had struggled with—especially statistics. Statistical concepts did not come easily to me. I describe my early approaches to learning as "brute force" memorization as much as possible. For some concepts, it took teaching it to a few hundred students over a few years for me to really deeply understand. Education has changed me and my family relationships, in helpful and hurtful ways. I am currently a Professor of Teaching in UBCV's Psychology Department (hired in 2009 immediately on graduation, tenured in 2014). As I mature in my scholarly practice and personal growth, I increasingly question the use of quantitative methods in knowledge-making—even though I teach those very methods.

I extensively redesigned my PSYC 217 Research Methods course last term, inspired by some massive shifts, globally, locally, professionally, and personally, concentrated over the past three or so years. These shifts include the death of my Grandmother who raised me on 28 February 2023—losing her has been profound, and this term will mark the first anniversary of my tremendous grief (which is why I have asked a TF to lead review that day, as I will be taking the day off). Out of necessity, this term, I have largely kept my course the same as previous years I've taught PSYC 218, and am focusing my creative work on refreshing assignments and tests. I will be keeping watch for opportunities to bring authentic and critical awareness throughout the course, either this term or in the future.

REFERENCES AND INFLUENCES

Throughout this syllabus I have cited many published works, and drawn on many others for inspiration. I include them here (1) to model responsible, APA style citation and referencing practices we will be using in this course, and (2) to show you some of the many ways I use research to guide the decisions I make in my teaching practice and course design. These are <u>not</u> required reading, but you may find some of them interesting (e.g., Dunlosky et al., 2013).

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OUR CLASS SCHEDULE

This plan is subject to change. Changes will be announced on Canvas.

Note that the beginning of the course appears rather tight. Do not fall behind. Many of these concepts are already familiar for many students, and moving quickly there creates more space later in the course when concepts are most difficult.

Concepts build on each other and get increasingly challenging with each unit. If you find yourself falling behind, please come see any member(s) of the Teaching Team as soon as possible to get back on track.

Wk	Class Dates	Monday	Wednesday	Friday
1	January 8, 10, 12	Course Orientation Ch 1: Intro Statistics, Variables	Ch 1 (continued) Appendix A: Basic Math	Ch 2: Frequency Distributions • Week 1 Module Due on Canvas, including Survey
2	January 15, 17, 19	Ch 2 (continued)	Ch 3: Visual Displays of Data	Ch 4: Central Tendency and Variability ♣ CogLab "Stroop" Due
3	January 22, 24, 26	Ch 4 (continued) Ch 4 (continued) Learning Assessments Weighting Requests due	Ch 5: Sampling and Probability	Ch 5 (continued) CogLab "Change Detection" Due
4	Jan 29, 31, Feb 2	Test 1 (Chapters 1-5)	Ch 6: Normal Curve, Standardization, z Scores	In-Class SPSS Practice Lab #1 CogLab "Memory Span" Due
5	February 5, 7, 9	Ch 6 (continued)	Ch 7: Hypothesis Testing with z Tests	Ch 7 (continued) Assignment 1 Due
6	February 12, 14, 16	Ch 8: Confidence Intervals, Effect Size, and Statistical Power	Ch 8 (continued)	In-Class SPSS Practice Lab #2 ○ CogLab "False Memory" Due
		No classes: Reading Week Family Day (Canadian Holiday)	No classes: Reading Week	No classes: Reading Week CogLab "Risky Decisions" Due
7	Feb 26, 28, Mar 1	Ch 8 (continued)	TF-led Review ○ Assignment 2 Due	Test 2 (Chapters 6-8)
8	March 4, 6, 8	Ch 9 & 10: Single and Paired Sample t Tests	Ch 9 & 10 (continued)	In-Class SPSS Practice Lab #3
9	March 11, 13, 15	Ch 11: Independent Samples t Test	Ch 11 (continued)	Ch 11 (continued) Assignment 3 Due
10	March 18, 20, 22	Ch 12: One-Way Between- Groups ANOVA	Ch 12 (continued)	In-Class SPSS Practice Lab #4
11	March 25, 27	Catch-up	Test 3 (Chapters 9-12)	❖ Assignment 4 Due March 29 University closed. Good Friday (Canadian Holiday)
12	April 3, 5	University closed. Easter Monday (Canadian Holiday)	Ch <mark>15</mark> : Correlation	Ch <mark>16</mark> : Regression
13	April 8, 10, 12	In-Class SPSS Practice Lab #5	Ch <mark>15/16</mark> (continued)	Ch 15/16 (continued) Last Day of Classes
		Assignment 5+6 Due MONDAY Apr 15		and during a surge paried April 16 Apr 27

The final exam date will be set by the registrar. Do not book appointments or travel during exam period, April 16 to 27, 2024, including Saturdays and Sundays. The Final Exam is cumulative and will include class and reading material from the entire semester.