VERSION 1: 4 JANUARY 2022

PSYC 218 Sections 001 and 002

ANALYSIS OF BEHAVIOURAL DATA



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 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, as long as our interpretations are correct). And 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 learn things about people.

Keep in mind that this course is an *introduction*. We're not going to master 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!

LEARNING DURING A GLOBAL PANDEMIC

We are *still* striving to learn in the context of a global pandemic. I have drawn on my teaching experience during and before the pandemic to design this course with care. As usual, this course mixes work I'll ask you to do independently, work you'll do with classmates, and work we'll do together. As is always true in any of my courses, regular, active engagement is essential for success.

Join me for class 9-9:50am (Section 1), 10-10:50am (Section 2). In line with UBC's Dec 22 announcement, we will begin the term together online. See Canvas.ubc.ca for the Zoom link. Please see https://keeplearning.ubc.ca/ for strategies for setting up and learning effectively online, and reach out if you need extra support beyond what I offer in the syllabus.

Hopefully we will be able to resume in-person classes later in the term in <u>AERL Room 120</u>. **Regardless of that decision**, <u>ALL TESTS AND THE FINAL EXAM WILL BE HELD</u> <u>ONLINE</u>. Recordings of all classes (online and eventually in-person) will be available on Canvas for those in need.

MEET OUR TEACHING TEAM

For how to contact us, including office hours, please see our Communication and Support Guide linked from our homepage on Canvas.

Professor of Teaching

Dr. Catherine Rawn (she/her)



Please use Canvas Inbox rather than email (cdrawn@psych.ubc.ca). <u>Website</u> | Twitter <u>@cdrawn</u>

TEACHING FELLOWS. TFs are here to help you learn and help me to evaluate your learning. They will lead SPSS tutorials, 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.

Todd KAMENSEK	Ryan TOMM		
Toddk14@mail.ubc.ca	tomm@psych.ubc.ca		
Zohreh SOLEIMANI	Linnan Zhou		
zsoleimani@psych.ubc.ca	linnan.zhou@ubc.ca		

SYLLABUS TABLE OF CONTENTS

2-3	Course Goals, Materials Needed		
3	Guiding Theory, Fitting this Course in your Degree		
3-6	Learning Assessments (with Choices)		
7-12	Supports, Safety Nets, and Policies		
	 Personal emergencies and challenges 		
	 Learning Communities 		
	 In our shared spaces 		
	 Learning with academic integrity 		
	 Safety nets and built-in flexibility 		
	 Psychology Department Policies 		
12	References and Influences		
12-13	Acknowledgement and Copyright		
14	Our Class Schedule		

COURSE GOALS

I wrote these course goals to provide direction for all our learning activities and assessments (see <u>Constructive Alignment</u> 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).
- 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.
- 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. Detailed instructions and links are available in the Course Introduction (Start Here!) module on Canvas.

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 (but see below for financial hardship information).

Essential (e-)Books

 TEXTBOOK with Launchpad Access – needed Week 1 especially for math refresher resources. Nolan, S. A., & Heinzen, T. E. (2021). Essentials of Statistics for the Behavioural Sciences, (5th Ed.). New York, NY: Worth. **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 e-book access too) for easier reference during open book tests, and for reference in the future.

Please begin by signing up for the 2-week free trial through the link in the **Canvas Module called:** "Access Nolan & Heinzen LaunchPad (eBook, quizzes, study guides)." This will get you started, and enable you to try out the first LearningCurve quizzes and other resources. Further instructions for how to "Verify" your purchase will be available in the Canvas Module called "Course Introduction" (Materials).

 LAB GUIDE – not needed until Week 4. Cuttler, C. (2020). A student guide to SPSS, (3rd Ed.). NJ: Kendall Hunt. This guide will be indispensable when it comes to completing the assignments throughout this course, including software screenshots and detailed tips. Please see Canvas for purchase options and use instructions. *I* recommend the hard copy option (or printing some of the ebook) for easier reference during assignments, when you will have at least 3 other windows open. May also be helpful for future work.

Essential Sites, Software, and Technology

- 3. A computer with speakers, microphone, internet access, and some space for software downloads (below). Chromebooks and tablets will encounter difficulties.
- 4. Our PSYC 218 001/002 2021W Canvas Course Website <u>canvas.ubc.ca</u> is our home. Everything you need can be found there, including links to classes on Zoom (and "Cloud Recordings" after) using the "Zoom" link on the left, "Clicker" style quizzes for each class period, as well as Weekly Modules (especially Your Complete Week Guides) and weekly Announcements created to keep you on track and organized. All assignment details and submissions will happen here. Use the Canvas Inbox to reach me and the Calendar to keep organized. Works best with Chrome browser. Please check your Account >> Notifications settings to ensure you receive announcements and other notices.
- 5. **COGLAB 5.0** *not needed until end of Week 2* is the tool used across all PSYC 218 sections to generate Assignment data. An access code is available for purchase from the Bookstore (follow

instructions on Canvas). *Please use the same first and last name as your official UBC registration.*

- IBM SPSS Statistics Software not needed until 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.
- Microsoft Word Software not needed until Week
 You must complete assignments using MS Word (.pages files don't work). Please download <u>MS</u> Office 365 for free from UBC IT.
- G*Power not needed until Week 6. Free to download here <u>http://www.gpower.hhu.de/.</u>
- Recommended additional technology. A <u>basic</u> <u>calculator</u> that can quickly do squares and square roots (will be helpful for quick calculations during class and tests). A <u>webcam</u> for (optional) use during class and especially breakout groups.

Financial Hardship: If you are experiencing serious financial hardship and are unable to purchase the e-textbook with Launchpad access, and/or the SPSS guide, please ask me to arrange access. I have negotiated with the publishing company for this access to support students in financial need. (As a first-generation undergraduate student who relied fully on student loans, I understand financial hardship. Please reach out!) See also the <u>Student Discounts for Remote Learning</u> page, as well as the Financial Support Options page in our Student Resources Canvas Module.

GUIDING THEORY

I am a social psychologist, and have long been interested in motivation and learning. Increasingly (and especially since COVID-19 moved our learning experiences online) I draw on **Self Determination Theory** (Ryan & Deci, 2000) to inform my teaching practice. I strive to create conditions that support your experience of autonomy, competence, and relatedness. Where can you spot <u>applications</u> of this in this course design? What additional ideas do you have for how to apply this theory? For more information, check <u>https://selfdeterminationtheory.org</u>.

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, mastery quizzes, tests), and *relatedness* (e.g., Learning Community discussions, regular self-selected Zoom breakout groups).

To support your *autonomy*, you may decide the value of particular assessments in the calculation of your final grade by choosing a value from within the ranges provided in the column on the right. Make sure that the values you decide <u>add up to a total grade value of 100%</u> and that you let me know your decision by sending me a message <u>using Canvas inbox</u> *before* 11:59pm PT on Monday 24 January 2022. No changes will be permitted after that date. If you wish to have your final grade calculated using the proposed value for each item, no email is required to confirm this; the proposed values will be used for all students who have not specified otherwise before the deadline. (See Rideout, 2018, for evidence supporting this flexible assessment approach.)

Regardless of choices, everyone will have the opportunity to meet all Course Goals while practicing a variety of skills that will benefit them in future classes, in the workplace, and in their personal lives. The more Assessment types you choose, the more structure you will have to scaffold your learning across this course. *Please find details of each Assessment below the table.*

Learning Assessment	Due Date	Proposed	<u>OR</u> Choose the value for
	(Vancouver Time – see clock on	Value (% of	you
	Canvas homepage)	final grade)	(% of final grade)
1. Assignments	1. Friday February 11 (4%)	24%	24%
(All 218 Sections Requirement)	2. Friday March 4 (4%)		
	3. Friday March 18 (4%)		
	4. Friday April 1 (4%)		
	5&6 combo. Monday Apr 11 (8%)		
2. Research Experience Component	Complete by last day of classes.	3%	3%
(Human Subject Pool Participation;	Be sure to assign your credit		
All 218 Sections Requirement)	value to <i>this</i> course!		
3. Weekly Learning Activities	Throughout the term	2%	0-5%
4. LaunchPad LearningCurve Quizzes	12 short quizzes, flexible dates	5%	0-5%
5. Test 1	Monday January 31	12%	0-15%
6. Test 2	Wednesday March 2	12%	0-15%
7. Test 3	Monday March 28	12%	0-15%
8. Final Exam (Cumulative)	TBD (April 12-27)	30%	20-50%
Total		100%	MUST ADD TO 100%

1. Assignments (6 x 4%)

Assignments form the heart of all sections of PSYC 218. Like in all sections of this course, six lab assignments 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. Note that Assignments 5 and 6 will be combined at the end of the course. Each lab assignment has three components. Consult the Course Schedule on the last page of this syllabus and due dates set in Canvas. It is possible these dates could change. You are responsible for checking Canvas (especially Announcements) to find out about any changes.

Part 1. Participate in CogLab. You will be asked to spend 10-30 minutes competing an online experiment or survey. This step will allow us to generate a dataset the class will use for the assignment, and will help you develop a deeper understanding of data analysis and interpretation because you have experienced the study as a participant. *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 the corresponding assignment itself is launched, then you will receive a 1% deduction. This will typically give you about 2 weeks or more beyond the stated deadline.

Part 2: Prepare for the Assignment by reviewing the *Student Guide to SPSS* and participating in In-Class SPSS Practice Labs. It is important to read the appropriate chapter(s) for each lab assignment in Cuttler's *A Student Guide to SPSS* (details to come in Your Weekly Guides). These 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.

Part 3. Complete the Lab Assignment. After each in-class SPSS demonstration, I will post an assignment for you to complete on your own time. All assignments will be posted on Canvas, where you will submit them. The assignments will require you to analyze and interpret the data from one of the CogLab or Surveys our class has generated. You will have about 1 week to complete each assignment. Check the Course Schedule for specific due dates.

Lab assignments must be completed independently. 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. 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 the section below called **Supporting Learning with Academic Integrity** for more information about expectations for assignments.

2. <u>Research Experience Component (REC) (3%)</u>

The REC is worth 3% of every PSYC 218 student's course grade, and is designed to help you learn more about psychology and how research is conducted, and to provide you with first-hand experience with psychological research. This experience may make understanding research easier (Ceynar Rosell et al., 2006) and may help you decide whether research is a reasonable career option for you.

One way to meet the REC requirement is to spend three hours participating in psychology studies through the Department of Psychology's Human Subject Pool (HSP) system: **1 hour of participation or 1 article summary = 1% (x 3 that are needed)**. For each hour of participation, you can earn one credit towards your final grade. You can sign up for studies by visiting <u>https://ubc-psych.sona-systems.com</u>. If you prefer, you can earn these same extra credits by completing a library-writing project, in which you read and summarize a peer-reviewed research article. You can find out more about how you can earn extra credits at <u>https://psych.ubc.ca/hsp</u>. There you will find a detailed guide about how to participate in the HSP, how-to videos, and a list of frequently asked questions. 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.

3. Weekly Learning Activities

Each week I will ask you to engage in a few brief activities. These are all low stakes, yet important for keeping you engaged, building *competence*, and helping me understand what you are learning. Combined, these activities will be valued at 2% of your course grade (by default, or 0-5% if you request a change, as above) – which makes each individual activity valued at a very tiny amount of your course grade. There are two main activities each week (clicker quizzes and discussions), as well as a few others that will be added here and there (e.g., demos, feedback midterm survey). Check the Week's Module to ensure you have completed the week's activities. If you fall behind, just catch up when you can during the two week grace period (see the section on *Safety Nets*, below).

Class "Clicker" Quizzes. In order to maximize our flexibility, we are going to use Canvas quizzes to record your responses to questions during class time (we'll try out show of hands or some other method to gather response data instantly). Please use your <u>Canvas Student App</u> or your web browser during class (either live or if you're watching the video later). If you're watching the video and fast forward to find the answer, you are only robbing yourself of a learning opportunity, and are engaging in academic misconduct. Please see the section below called *Supporting Learning with Academic Integrity* for more information.

Weekly Learning Community Discussions. Each week, you will have the chance to engage in asynchronous, online discussion about the topics of the week. You are a member of a Learning Community (to help foster *relatedness* and build community among us). I will prepare some prompting questions, from which you can choose. Questions will be geared to help you apply concepts, deepen our understanding of challenging topics, and see research methods all around us. You are encouraged to respond to others' posts to help you and everyone develop their thinking further.

4. Launchpad LearningCurve Quizzes

Would you benefit from regular, low-stakes quizzes to keep you on track for readings and to practice your understanding of key concepts? Then this *competence*-building option is for you! Combined, these adaptive LearningCurve quizzes will be valued at 5% of your course grade (by default, or 0-5% if you request a change, as above) – which makes each individual quiz valued at a very tiny amount of your course grade.

My understanding is that these quizzes each take about a half hour or less to complete, and they focus on conceptual understanding but (unfortunately) not calculations. Take as long as you like to complete the quiz

until you reach Mastery of those concepts. 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.

Why does the interface and value differ from your course last term? If you took my PSYC 217 course last term, we used a similar Mastery Quiz called Smartbook Quizzes, which is created by the McGraw-Hill Ryerson publishing company. Our textbook for PSYC 218 is published by a different company, MacMillan, so they have their own interface and approach to these mastery quizzes. A key difference is length: LearningCurve Quizzes are much shorter.

What if I want more practice questions, especially calculations? I have also "assigned" Practice Quizzes within the Launchpad interface to help give you some more practice questions to use for calculations. There are also practice questions at the end of every chapter, and the textbook Appendix C provides answers to half of them. Find a study group to discuss the rest!

5. 6. 7. Tests 1, 2, and 3

Each test will be out of approximately 25 points and will be administered using Canvas with a 50-minute time limit, and Respondus Lockdown Browser. They will be open book/notes, and will randomly sample questions from a broader set so no two tests are identical. You must complete a brief "Getting Ready for Test #" survey on Canvas in advance, to affirm when you are writing it, to ensure you are aware of the essential details, and to ensure you can use Respondus Lockdown Browser correctly. If you cannot join us synchronously for Tests, you can register for a deferred time in advance on this "Getting Ready" survey.

Don't let the open book/notes nature of the tests mislead you into a false sense of security. 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). Question types will include a mix of multiple choice, fill-in-the-blanks, and written answers.

By default, tests will be valued at 12% each, but can range from 0-15% each. If you choose not to count tests toward your grade (declared at the start of the term; see instructions earlier), you can still write them for practice but they will not count. All tests are to be completed by you and you alone, using only materials authorized explicitly by me. Please see the section below called *Supporting Learning with Academic Integrity* for more information about expectations during testing.

8. Final Exam (Cumulative)

The final exam date will be set by the Registrar during the official final exam period, and will be administered using Canvas with a 2.5-hour time limit. It will be open book/notes, and will randomly sample questions from a broader set so no two tests are identical. 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. Question types will include a mix of multiple choice, fill-in-the-blanks, and written answers. By default, the final exam will be valued at 30%, but can range from 20-50% depending on your choice at the start of the term.

The final exam is to be completed by you and you alone, using only materials authorized explicitly by me. Please see the section below called *Supporting Learning with Academic Integrity* for more information about expectations during testing. <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.

BUILDING OUR COMMUNITY: SUPPORTS, SAFETY NETS, AND POLICIES

Be kind. Be calm. Be safe.

- Dr. Bonnie Henry, Provincial Health Officer, British Columbia, Canada

We are *still* living in a time of global pandemic. Some of our classmates have joined us in Vancouver from around the world—maybe you're still on the way to us. Any of our circumstances may change at any time. I invite you to join me in taking inspiration from Dr. Henry as we begin to engage together.

Please see <u>https://keeplearning.ubc.ca/</u> for strategies for setting up and learning effectively online.

In this section, you will find...

- Supporting you (and me) through Personal Emergencies and Challenges
- Support through Learning Communities and Zoom Breakout/Study Groups
- Supporting Each other in our Shared Online Space
- Supporting Learning with Academic Integrity
- Supporting Your Success and Well-Being with Safety Nets and Built-in Flexibility
- Psychology Department Policies

Supporting you (and me) 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: <u>https://bc.thrive.health/covid19/en</u>. If you experience a personal emergency during this time, please seek the resources and support you need to cope with that emergency. Check <u>https://students.ubc.ca/health</u>, 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 (see below) are sufficient accommodation; otherwise, I'll ask that you review the interm concession criteria <u>available here</u> to determine whether you are eligible for concession through the Self-Declaration form (if yes, please complete it and send to me). In more complex or longer-term affecting situations, please seek <u>Arts Academic Advising</u>.

Check out these support resources *before* an emergency. See <u>https://students.ubc.ca/health</u> and especially <u>https://students.ubc.ca/covid19/mental-health-during-covid-19-outbreak</u> for ways to care for yourself during the pandemic and beyond. See also the Arts Student Support portal for wellness, academic, and broader support: <u>https://www.arts.ubc.ca/student-support/</u>.

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 our tests that you are writing. When you do that part, it's easier for me to check that I am offering you the accommodations you need.

Support through Learning Communities (LC)

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 discussion threads and activities aimed at connecting all of us as we learn. Because our class is so large (about 200 people across the two sections), we will be dividing into smaller groups, thereby supporting 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, wikis, and collaboration.

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.

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), we can help you set that up.

Supporting Each Other in our Shared Spaces

We are coming together in various ways, online and (we hope!) in person, to do this work of learning. 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. We hope to also hold space with each other in our physical classroom (AERL 120). These shared learning spaces are governed by and shaped by all of us.

In order to support all of our classmates, regardless of their personal circumstances, we will be recording all synchronous sessions that occur on Zoom, as well as those that may occur in AERL in the future. Zoom recordings will include the chat thread. **Recordings and chat threads 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.**

I've been holding space for learning in physical classrooms for about 15 years. While teaching this same course 2019W2, the first lockdown occurred: In March 2020, I led the emergency pivot from in-person to online. Then, from July 2020 through April 2021, I led 3 courses in a completely online space. Last term I incorporated both online and face-to-face elements in a "hybrid" course. All this to say, I'm confident we'll make it through whatever this term throws at us. Let's all be patient and figure this out together.

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>, <u>consequences</u>, and expectation that students must clarify how <u>academic honesty</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.

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 an open book 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>. Assignments that are explicitly the product of group collaboration *have authorization*, so don't count as collusion. *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). 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 textbook 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) 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 <u>http://learningcommons.ubc.ca/resource-guides/avoiding-plagiarism/</u>. 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. **If you need more support beyond this, please reach out. I will offer patience, flexibility, and compassion, and I expect honesty and flexibility in return.**

- There is no penalty for missing synchronous learning experiences (e.g., because of caregiving or required isolation) if it is made up. For every class meeting, I will strive to make recordings and activities available for those who need this accommodation. For example, Lesson "Clicker" style quizzes on Canvas will provide opportunities to answer questions posed/discussed during class, and will continue to be available for two weeks to those watching the recording. *If you have other ideas about how I can best support you, please let me know.*
- Flexible weighting of Learning Assessments. You choose how much you can engage with this course from the start. Please see Learning Assessments section for instructions on how and when to do this.
- Late Assignments: Most Assignments are due on Fridays, the last is due on the Monday after classes finish (see Course Schedule for specific dates). If you need more time for whatever reason, feel free to submit over the weekend (until Sunday night at 11:59pmPT; for the last assignment, you have until Tuesday night at 11:59pmPT), no questions asked and no penalty. To be clear: you don't need to ask for these two days, 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 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 Concession from Arts Advising).

- LearningCurve adaptive mastery quizzes: I have set the deadline for these quizzes to be the last day of classes. Of course, I don't recommend you wait until then! To help you keep on track, I will embed the assignment links in the Weekly Modules. But you have until the last day of classes to complete them.
- Weekly Learning Activities: If you miss routine asynchronous work (e.g., Weekly Learning Community Discussion) or synchronous work (e.g., clicker quiz), please catch up by completing it as soon as you can, no questions asked. After each activity's set due date, you will have a two-week grace period. If you submit during that window, your point will be updated.
- **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.

Psychology Department Policies

Grading

Department-wide policy for 2020W: "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. **However, in the spirit of flexibility and compassion in light of the ongoing COVID-19 pandemic, those departmental norms have been adjusted upwards by 5% for 2021W.** According to these adjusted norms, 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- and 400-level classes will be 75, 73, and 71, with a standard deviation of 13. Scaling may be used in order to comply with these norms; grades may be scaled up or down as necessary by the professor or department. Grades are not official until they appear on a student's academic record. You will receive both a percent and a letter grade for this course. At UBC, they convert according to the key below:

A+	90-100%	B+	76-79%	C+	64-67%	D	50-54%
А	85-89%	В	72-75%	С	60-63%	F	0-49%
A-	80-84%	B-	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 (<u>http://students.ubc.ca/calendar</u>).

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).

- American Psychological Association. (2013). APA guidelines for the undergraduate psychology major 2.0. Washington, DC: Author. Retrieved from http://www.apa.org/ed/precollege/about/psymajorguidelines.pdf
- Ceynar Rosell, M., Beck, D. M., Luther, K. E., Goedert, K. M., Shore, W. L., & Anderson, D. D. (2006). The pedagogical value of experimental participation paired with course content. *Teaching of Psychology*, 32, 95-99. DOI: 10.1207/s15328023top3202_3
- Darby, F., & Lang, J. M. (2019). Small Teaching Online: Applying Learning Science in Online Classes. Jossey-Bass.
- Dunlosky, J., Rawson, K. A., Marsh, E. J., Nathan, M. J., & Willingham, D. T. (2013). Improving students' learning with effective learning techniques: Promising directions from cognitive and educational psychology. *Psychological Science in the Public Interest*, 14, 4-58. DOI: 10.1177/1529100612453266
- Fink, L. D. (2003). *Creating significant learning experiences: An integrated approach to designing college courses*. San Francisco, CA: Jossey-Bass.
- Glass, A. L., & Kang, M. (2018). Dividing attention in the classroom reduces exam performance. *Educational Psychology*, DOI: 10.1080/01443410.2018.1489046
- Kliegal, R., & Bates, D. (2011). International collaboration in psychology is on the rise. *Scientometrics*, *87*, 149-158. DOI: 10.1007/s11192-010-0299-0
- Michael, J. (2006). Where's the evidence that active learning works? *Advances in Physiology Education, 30*, 159-167. DOI: 10.1152/advan.00053.2006
- Rideout, C. A. (2018). Students' choices and achievement in large undergraduate classes using a novel flexible assessment approach. *Assessment & Evaluation in Higher Education, 43,* 68-78. DOI: 10.1080/02602938.2017.1294144
- Roediger, H. L., III, & Karpicke, J. D. (2006). Test-enhanced learning: Taking memory tests improves long-term retention. *Psychological Science*, *17*, 249-255. DOI: 10.1111/j.1467-9280.2006.01693.x
- Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, *61*, 101860.
 DOI: 10.1016/j.cedpsych.2020.101860

ACKNOWLEDGEMENTS AND COPYRIGHT

UBC Vancouver's Point Grey Campus is situated on the traditional, ancestral, and unceded territory of the <u>Musqueam people</u>. The work of redesigning this course in summer 2020 occurred on the traditional territories of the Musqueam, Squamish and Tsleil-Waututh peoples.

Thanks to G. Hall, C. Cuttler, L. Scratchley, and J. Sibley for helpful suggestions that have influenced the design of this course. This syllabus design was inspired by a syllabus by J. Lymburner (Kwantlen Polytechnic University). Thanks to all of my PSYC 218 students, Teaching Fellows, and Teaching Assistants since 2011/2012 for their helpful suggestions and experiences, which have influenced the design and implementation of this course. Flexible assessment strategy and language was adopted for W2020, drawing on Dr. Candice Rideout's (UBC, Faculty of Land

and Food Systems) scholarly research, advice, as well as her FNH 355 course syllabus (with permission). Academic Integrity language and approach has been greatly informed by the work of Dr. Laurie McNeill and Dr. Sarah Elaine Eaton.

PSYC 218 Sections 001 and 002 Research Methods in Psychology Course Syllabus 2022 by Catherine Rawn is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License. To view a copy of this license, visit <u>http://creativecommons.org/licenses/by-nc-sa/4.0/</u>.

Recommended APA-style citation:

Rawn, C. D. (2022). PSYC 218 Sections 001 and 002 Research Methods in Psychology Course Syllabus. University of British Columbia, Vancouver Canada. Retrieved from http://blogs.ubc.ca/catherinerawn

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 difficult 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
	lanuari	Course Orientation	Ch 1 (continued)	Ch 2: Frequency Distributions
1	January 10, 12, 14	Ch 1: Intro Statistics, Variables	Appendix A: Basic Math	Course Introduction Module Due or Canvas, including Survey
2	January 17, 19, 21	Ch 2 (continued)	Ch 3: Visual Displays of Data	Ch 4: Central Tendency and Variability CogLab "Stroop" Due
3	January 24, 26, 28	Ch 4 (continued) Ch 2 Learning Assessments Weighting Requests due	Ch 5: Sampling and Probability	Ch 5 (continued) CogLab "Change Detection" Due
4	Jan 31, Feb 2, 4	Test 1 (Chapters 1-5)	Ch 6: Normal Curve, Standardization, z Scores	In-Class SPSS Practice Lab #1 CogLab "Memory Span" Due
5	February 7, 9, 11	Ch 6 (continued)	Ch 7: Hypothesis Testing with z Tests	Ch 7 (continued) Ch 7 signment 1 Due
6	February 14, 16, 18	Ch 8: Confidence Intervals, Effect Size, and Statistical Power	Ch 8 (continued)	In-Class SPSS Practice Lab #2 CogLab "False Memory" Due
	February 21, 23, 25	No classes: Reading Week Family Day (Canadian Holiday)	No classes: Reading Week	No classes: Reading Week CogLab "Risky Decisions" Due
7	Feb 28, Mar 2, 4	Ch 8 (continued)	Test 2 (Chapters 6-8)	Ch 9: Single and Paired Sample t Tests Assignment 2 Due
8	March 7, 9, 11	Ch 9 (continued)	Ch 9 (continued)	In-Class SPSS Practice Lab #3
9	March 14, 16, 18	Ch 10: Independent Samples t Test	Ch 10 (continued)	Ch 10 (continued) Ch Assignment 3 Due
10	March 21, 23, 25	Ch 11: One-Way ANOVA	Ch 11 (continued)	In-Class SPSS Practice Lab #4
11	March 28, 30, Apr 1	Test 3 (Chapters 9-11)	Ch 13: Correlation	Assignment 4 Due Ch 14: Regression
12	April 4, 6, 8	In-Class SPSS Practice Lab #5 Ch 13/14 (continued)	Ch 13/14 (continued)	Ch 14 (continued) Last Day of Classes
13	April 11	No classes. Term over. Assignment 5+6 Due	No classes. Term over. Exam period began yesterday (Apr 12-27).	No exams, university closed today (and Monday). Good Friday (Canadian Holiday)

is cumulative and will include class and reading material from the entire semester.