PH142 Fall 2021 Course Syllabus Dr. Corinne Riddell



Dear Students,

I began writing this on August 16 and can't believe that in a little over a week we will meet for our first remote lecture, bright and early, at 8am. I have mixed feelings about teaching remotely – PH142 is a large class (around 330 students right now) and so not meeting all in person will limit transmission of the virus. On the other hand, I really enjoy teaching in person and this will be the second time PH142 is taught remotely. The good news is that many of the labs are offered in person (with 1 online and recorded), so I hope this allows each of you to engage with the Graduate Students Instructors (GSIs) in person if you wish, or stay fully online if that is your preference.

The takeover of Afghanistan by the Taliban is front-of-mind today. I am thinking about our students with ties to Afghanistan and hope that your families are safe. I'm also thinking about the girls' schools that have closed and how lucky we are to receive an education and continue to study the subjects that matter most to each of us. As your instructor, I recognize my large responsibility for your education in statistics. I have worked hard since Fall 2018 to recreate this course and I will teach you to the best of my ability and with consideration of your feedback throughout the semester.

A couple of weeks ago, the IPCC released a report unequivocally stating the role of humans in climate change. Many of you, especially the students studying environmental health and related disciplines, will conduct important work and ask how climate change affects human health. The skills you learn in this class will aid you in that work. The teaching team focuses our efforts on teaching you the practical skills required to perform data analyses. Through the years, I've been so impressed with the important work you go on to do in your internships and careers. I can't wait to see what you all do!

Speaking of the IPCC and climate change... the Bay Area has not been greatly affected by wildfires and power shut offs yet this year, but it looks like air quality may be getting worse in the coming days and there may be incident fires in the coming months that have a larger effect on us in the Bay. In this case, I will modify the schedule to accommodate changing circumstances.

Each year, the PH142 cohort of students represents a diverse range of life experiences. Many of you are undergraduates in public health or related disciplines, while others join us from the MPH degree or other graduate programs. In times of stress, I've heard undergrads worry about competing with graduate students since graduate students are often older and bring a multitude of life experiences. Conversely, grad students worry that the undergraduates are more prepared for quizzes and midterms because they've honed their test-taking skills. Let me assure you that the distribution of performances across graduate and undergraduate students is indistinguishable! I hope that we can see this as an opportunity to learn from each other.

If this is like previous years, many of you are also nervous about this class and taking it because it is required for your degree. Some of you received messages when you were young that you aren't a "math person" and those messages likely vary based on gender, race and ethnicity, and where you went to school. We've set up this class to offer many opportunities for practicing what you've learned each week, including weekly labs submitted for completion, and quizzes to help you stay on top of the material and to provide a marker if you need to ask for extra help. This is also a plea for you to

come to my office hours and the TA hours!! I would love to engage with you there and like best to help students who feel the most behind. I promise to never shame you for where you are at and to do my best to get you up to speed in the time we have!

I'm looking forward to meeting you. Please review the attached syllabus that covers policies, the timing of any submitted material, and the course outline. It is essential pre-course reading!

See you soon,

Prof. Corinne Riddell, MSc PhD

PH142: Introduction to Probability and Statistics in Biology and Public Health

Course Syllabus (Fall 2021)

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Course Information

Course Meeting Dates/Times:	Lecture MWF 8:10-9:00am Labs: 101B Th 5:10P-7:00P (Dwinelle 187) 102B W 2:10P-4:00P (Wurster 101) 103B F 9:10A-11:00A (VLSB 2066) 104B W 9:10A-11:00A (Barker 110) 105B W 4:10P-6:00P (VLSB 2030) 106B W 5:10P-7:00P (Dwinelle 246) 107B Th 11:10A-1:00P (zoom) 108B W 1:10P-3:00P (Stanley 179) 109B W 9:10A-11:00A (VLSB 2062) 110B F 9:10A-11:00A (VLSB 2038) 111B Th 4:10P-6:00P (Dwinelle 283)
Course Location:	Lectures offered remotely on zoom
Instructor:	Corinne Riddell, MSc PhD (she/her/hers)
Phone:	N/A
Email:	c.riddell@berkeley.edu
Instructor Availability:	Wednesdays 1-2pm, location TBD
GSIs:	Kelsey MacCuish (Head GSI), (she/her/hers) Chandler Beon (Technical GSI), (he/him/his) Nolan Gunter (they/them/theirs) Maggie Kuang (she/her/hers) Tyler Mansfield (he/him/his) Noel Pimentel (he/they/him/theirs) Sky Qiu (he/him/his) Xiangyu Yu (he/him/his)
Email:	ph142@berkeley.edu
Course Canvas/bCourses link:	https://bcourses.berkeley.edu/courses/1508029

Course Website:

https://ph142-ucb.github.io/fa21/

Course Unit:

Contributing Instructors:

Mi-Suk Kang Dufour

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Course Description

This course is an introduction to statistics and data science, primarily for MPH and undergraduate public health majors, and others interested in public health topics. The course can be divided into three parts. In Part I, we will focus on learning to use R to explore and summarize univariate and bivariate distributions. Specifically, we will use the dplyr and ggplot2 packages to manipulate and visualize data sets in R. Part II of the course introduces classical problems in probability and the Normal, binomial, and Poisson distributions. The most important topic we will cover in Part II is the Central Limit Theorem. In Part III, we introduce statistical inference, the process of estimating statistics from samples to make inference about populations. During all parts of the course we will use real and simulated data sets to gain experience conducting biostatistical analyses using R. We will follow the PPDAC model, which stands for "Problem, Plan, Data, Analysis, and Conclusion".

Prerequisites

High school algebra

Course Learning Objectives

After successfully completing Part I of the course, you will be able to:

- Describe distributions of variables visually and calculate summary statistics for measures of centrality and spread
- Determine the appropriate graphic to plot distributions and provide R code snippets to manipulate and visualize data frames
- Interpret output from a simple linear regression model

After successfully completing Part II of the course, you will be able to:

- Compute probabilities using the general rules
- Identify and describe binomial and Poisson random variables
- Compute probabilities using basic properties of the Normal distribution
- Describe the central limit theorem

• Write R code snippets to compute probabilities for the Normal, binomial, and Poisson distributions

After successfully completing Part III of the course, you will be able to:

- Estimate means, proportions, and differences between means and proportions, compute their confidence intervals and perform statistical tests
- State the assumptions and importance of the assumptions for statistical tests
- Perform a simple chi-squared test
- Perform a matched t-test
- Describe and check the assumptions for simple linear regression. Interpret the confidence interval and statistical test of regression intercept and slope coefficients
- Describe ANOVA, including the null and alternative hypotheses, and interpret output
- Describe when bootstrapping can be used
- Describe a permutation test
- Demonstrate knowledge that has been used throughout the term, in terms of data visualization and data manipulation
- Write R code snippets to perform hypothesis tests and calculate p-values

Methods of Instruction

Lectures on Monday, Wednesday, and Friday 8:10-9:00am, offered synchronously and recorded. Eleven weekly two-hour lab sections, 10 offered in person and 1 offered synchronously and recorded.

Instructor Information

Dr. Corinne Riddell Divisions of Biostatistics and Epidemiology School of Public Health University of California, Berkeley 2121 Berkeley Way West, Room 5404 Berkeley, California 94704-7360

Office hours: Wednesday 1-2pm location TBD



Dr. Corinne Riddell, PhD MSc, is a social and perinatal epidemiologist, and an Assistant Adjunct Professor of Biostatistics at the University of California, Berkeley, School of Public Health. She examines racial inequalities in health between Black and White Americans, to understand why some states have fared better at reducing inequalities than other states. In particular, she is interested in infant mortality and injuries (homicides, suicides, and overdoses) as contributors to very early deaths. Dr. Riddell uses interactive data visualization to explore these topics, as well as sophisticated surveillance and causal methodologies.

Course Format

Course Schedule

Date	Торіс	Readings	Lab (W, Th, or F)	Problem sets/other info
Wednesday, Aug 25	Introduction to the course, the cloud, and PPDAC	None	Lab01: Introduction to R and RStudio on	
Friday, Aug 27	Working with data in R and RStudio (dplyr package)	None	Datanub	Problem set #1 released at 9:30am Lab #1 due at 11:59pm
Monday, Aug 30	Visualizing data in R and RStudio (ggplot2 package)	None	Lab02: Visualization of global Cesarean	
Wednesday, Sept 1	Visualizing distributions for one variable, numerically summarizing spread and central tendency	Chapter 1 & 2	denvery rates	
Friday, September 3	Exploring relationships between two variables	Chapter 3		Problem set #2 released at 9:30am Lab #2 due at 11:59pm Quiz #1 available for 24 hours beginning Thursday at 5pm Google Form about the Data Skills Demonstration project sent to you
Monday, Sept 6	Holiday (Labor Day)		Lab03: Relationship between global	

Wednesday, Sept 8	Introduction to Regression	Chapter 4	cesarean delivery rates and GDP	
Friday, Sept 10	Two-way tables (Relationships between two categorical variables)	Chapter 5		Problem set #3 released at 9:30am Lab #3 due at 11:59pm Quiz #2 available for 24 hours Last day to complete Google Form about the Data Skills Demonstration project
Monday, Sept 13	Samples and observational studies	Chapter 6	Midterm I Review Session	GSIs to post review problems for Midterm I by 9:30am (will not be graded)
Wednesday, Sept 15	Live exercise: Sampling births from US territories	None		
Friday, Sept 17	Designing Experiments	Chapter 7		Quiz #3 available for 24 hours
Monday, Sept 20	MIDTERM 1		Lab04: Problem set on probability	
Wednesday, Sept 22	Introduction to probability	Chapter 9	calculations	
Friday, Sept 24	General rules of probability	Chapter 10		Problem set #4 released at 9:30am Lab #4 due at 11:59pm
Monday, Sept 27	General rules of probability continued	Chapter 10	Lab05: Problem set on sensitivity,	
Wednesday, Sept 29	The Normal distribution part I	Chapter 11	specificity, and the Normal distribution	

Friday, Oct 1	The Normal distribution part II	Chapter 11		Data Skills Demonstration Part I Due at 5pm Problem set #5 released at 9:30am Lab #5 due at 11:59pm Quiz #4 available for 24 hours
Monday, Oct 4	The Binomial distribution	Chapter 12	Lab06: Problem set on Normal, binomial	
Wednesday, Oct 6	The Poisson distribution	Chapter 12	and Poisson distributions	
Friday, Oct 8	Sampling distributions for a mean and proportion and The Central Limit Theorem	Chapter 13		Problem set #6 released at 9:30am Lab #6 due at 11:59pm Quiz #5 available for 24 hours
Monday, Oct 11	Confidence intervals for a mean with known standard deviation	Chapter 14	Lab07: Classroom simulation on the Central Limit Theorem and confidence intervals	
Wednesday, Oct 13	Hypothesis tests for a mean with known standard deviation	Chapter 15		
Friday, Oct 15	Power, type I and type II error, sample size (part I)	Chapter 15		Lab #7 due at 11:59pm Quiz #6 available for 24 hours
Monday, Oct 18	Inference for a population mean with unknown standard deviation	Chapter 17	Midterm II Review Session: see alternate lab schedule for this	GSIs to post review problems for Midterm II by 9:30am (will not be graded)

Wednesday, Oct 20	Catchup if we're behind	Chapter 17	week	
Friday, Oct 22	MIDTERM 2			
Monday, Oct 25	Comparing two means	Chapter 18	Lab08: Paired and two sample t-tests,	
Wednesday, Oct 27	Matched comparisons	Chapter 17	including classroom "hit the dot" game	
Friday, Oct 29	Inference for a population proportion	Chapter 19		Problem set #7 released at 9:30am Lab #8 due at 11:59pm Quiz #7 available for 24 hours
Monday, Nov 1	Comparing two proportions	Chapter 20	Lab09: Inference for Proportions	
Wednesday, Nov 3	Bootstrapping confidence intervals	None		
Friday, Nov 5	The Chi-square test for goodness of fit	Chapter 21		Problem set #8 released at 9:30am Data Skills Demonstration Part II Due at 5pm Lab #9 due at 11:59pm Quiz #8 available for 24 hours
Monday, Nov 8	The Chi-square test for two-way tables	Chapter 22	Lab 10: Problem set on the Chi-square test	

Wednesday, Nov 10	Permutation tests	None		*Thursday is a holiday - those with Thursday labs will have another option for this week*
Friday, Nov 12	Inference for regression I	Chapter 23		Problem set #9 released at 9:30am Lab #10 due at 11:59pm
Monday, Nov 15	Inference for regression II	Chapter 23	Lab 11: Interpreting a regression model on	
Wednesday, Nov 17	Comparison of many means (ANOVA)	Chapter 24	median household value and distance to employment centers	
Friday, Nov 19	ANOVA II/Tukey's HSD	Chapter 24	and checking modeling assumptions	Quiz #9 available for 24 hours Problem set #10 released at 9:30am Lab #11 due at 11:59pm
Monday, Nov 22	Non-parametric testing alternatives. Guest recorded lecture by Mi-Suk Kang Dufour	No Chapter	Holiday; No lab	
Wednesday, Nov 24	Holiday (Thanksgiving)		-	
Friday, 26 Nov	Holiday (Thanksgiving)			
Monday, Nov 29	Regression modelling with a categorical exposure		Final Exam Review Session	GSIs to post review problems for Final Exam by 9:30am (will not be graded)
Wednesday, Dec 1	Final exam review			
Friday, Dec 3	Biostatistics Jeopardy!			Data Skills Demonstration Part III Due at 5pm

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Monday, Dec 6	Reading week	 RRR Week; No lab	
Wednesday, Dec 8	Reading week		
Friday, Dec 10	Reading week		
Monday, Dec 13	Final Exam (7-10pm)		

Course Grading

Grading is based on the following:

• **Problem sets** will be distributed as R markdown files on Datahub at the dates and times noted in the table below. **They will not be submitted for grades** and you are encouraged to work on it in groups if that is how you learn best. **Completing the problem sets is your best preparation for the midterms and final examination.** All solutions will be posted on Datahub the Wednesday after the problem set is made available.

Problem Set	Release date	Task
1	Aug 27	Manipulate a dataset about mammalian sleep time
2	Sept 3	Summarize global cesarean delivery rates and GDP across 137 countries using histograms, boxplots, and measures of central tendency and spread
3	Sept 10	Predict insurance charges by age and BMI by first summarizing the relationship using a scatter plot and describing the correlation and then running simple regression models
4	Sept 24	Simulate birth defect data to study a random variable, calculate probabilities on HIV/HCV, and screening properties for lung cancer
5	Oct 1	Complete calculations on the Normal and binomial distribution by hand and using R
6	Oct 8	Complete calculations on the Poisson distribution and inference regarding a single mean by hand and using R
7	Oct 29	Estimate and interpret confidence intervals for the difference of two means and conduct a hypothesis test by hand and using R

8	Nov 5	Estimate and interpret confidence intervals for a single proportion or the difference of two proportions and conduct hypothesis tests by hand (large sample, plus four method) and using R (Clopper Pearson, Wilson Score methods)
9	Nov 12	Estimate and interpret the chi-square test for goodness of fit and independence and compare the results to that using a permutation test using R. Answer questions about the bootstrap.
10	Nov 19	Conduct a regression model and interpret the regression output, including the coefficient estimates, their standard errors, and associated p-values. Perform ANOVA calculations and non-parametric tests.

- Weekly Gradescope quizzes will be available for 24 hours from 5pm Thursday to 5pm Friday of 9 weeks as marked in the schedule. You can miss 1 week without penalty. Quizzes will be graded out of 10 points and meant to encourage you to keep on top of weekly content. They will cover material beginning Wednesday in the previous week to Monday of the week of the quiz. Once opened, you will have 1 hour to complete the quiz.
- Lab exercises are intended to practice concepts from lectures in a practical programming environment. You can complete and submit these during the lab section, or on your own time. Students often find it much more helpful to complete this in the lab rather than independently, but we understand students learn differently, so feel free to do what works best for you. Lab exercises are graded on correct completion, so you must complete the lab fully, passing all tests, in order to receive credit for the assignment. You may miss one lab without penalty. Labs can be submitted for completion marks until Friday at 10:00pm.
- Midterms I and II. There are two midterms offered on September 20 and October 22. The midterms are 75 mins long, and you can write them any time between 7:40am and 9:30am on the day of the test. Note that to get the full 75 minutes, you need to start the exam by 8:15am at the latest. The final exam is on December 13th, 7-10 pm. If you have a conflict with <u>any</u> of the exam dates, please email the instructor by September 1st so that we can discuss possible accommodations.

Accommodations cannot be made for individuals enrolled in another class at the same time as this one, so please take this class in another semester if doubly enrolled. Appropriate accommodations for the midterm will be made for those with disabilities (please refer to the "Disabilities" section, below). Please note that only in extremely rare circumstances such as illness (with a doctor's note) will the in-class midterm be given to individual students after the scheduled examination date. Exams will cover the material presented in lecture, discussion, and lab sections, including R coding syntax, unless otherwise noted.

- Midterms and final policies. The midterm and final will be open book. This means you <u>can use</u> electronic or hard copies of notes and the course textbook and additional resource list. You <u>may not</u> use the internet to search for the answers or inform your answers. Using the internet is <u>strictly prohibited</u> and any evidence of this may result in a 0 on the exam. During the test-writing window, you are prohibited from discussing the test with anyone. Evidence of cheating may result in a 0 on the test or further disciplinary action. The midterms will be timed to take 1 hour, and you will have an additional 15 minutes to account for any technical difficulties. We will not accept late submissions, so you are strongly encouraged to submit early. If you have unanticipated technical challenges affecting submission, please speak to a GSI in the exam clarifications zoom room. We strive to return graded examinations within one week of the exam date.
- Data skills demonstration group project. You may self-select into a group of 4 to 5 students by September 10. Optionally, we can assign you to a group if that is preferable for you. The purpose of the group project will be to use public health or biological data that you find or have access to and use it to demonstrate three statistical concepts that you've learned throughout the course. Details to come.
- **Extra credit.** You will have the opportunity to earn up to 2 additional percentage points on your final grade. Details coming soon!

Final grades will be assigned according to the following percentages:

Weekly quizzes	15%
Lab completion	5%
Midterm 1 (Sept 20)	20%

Total	100% + 2% extra credit
Final exam (Dec 13)	20%
Group project (Oct 1, Nov 5, Dec 3	20%
Midterm 2 (Oct 22)	20%

S/U (satisfactory/unsatisfactory) grading is permitted for this course. There are no differences in the course requirements or the grading for students who choose this option. "S" will appear on transcripts for grades of "B-" or above.

Course Materials

Course website

To access the course website, go to <u>https://ph142-ucb.github.io/fa21/</u>. Here you will find links to required and optional readings, the syllabus, assignment descriptions and additional course resources. Any changes will be reflected in the assignment section of the site.

Required Materials

We will be using **R**, a statistical programming language, and **RStudio**, an integrated development environment on **Datahub**, a cloud computing environment created at Berkeley. Use of R, RStudio, and Datahub is required for problem sets and lab exercises and requires an internet connection and web browser. You will learn how to use R, RStudio, and Datahub during the first week of classes. You can access Datahub from the links on the course website.

Optional Materials

The course textbook is "<u>The practice of statistics in the life sciences</u>" by Brigitte Baldi and David S. Moore. **The textbook is in the queue for digitization at the university library and will be made available online to you when it's ready.** In addition, students with print disabilities can request access for the book through the <u>HathiTrust Accessible Text</u> <u>Request Service</u>. The 4th edition of the textbook is the latest one, but previous editions are fine. You can also purchase or rent the book <u>here</u>. We rely on it more during Part II and III of the course than we do in Part I.

Other resources

In addition, here are some free online resources available as supplementary material. We link to these specific resources in the lecture slides when applicable:

- Learning statistics with R: <u>https://learningstatisticswithr.com/lsr-0.6.pdf</u>
- OpenIntro Statistics: <u>https://drive.google.com/file/d/0B-DHaDEbiOGkc1RycUtIcUtIeIE/view</u>
- A ModernDive into R and the Tidyverse: <u>https://moderndive.com/9-hypothesis-testing.html#ht-infer</u>
- Statistical Thinking for the 21st Century: <u>https://statsthinking21.github.io/statsthinking21-core-site/ci-effect-size-power.html#</u> <u>statistical-power</u>
- R for Data Science: <u>https://r4ds.had.co.nz/data-visualisation.html</u>

Announcements

Course announcements will also be sent out through a once-weekly email blast from Piazza.

Course Mail

We strive to reduce email as much as possible. All questions about course material should be asked on Piazza. We will not answer any questions about course material via email. Email the GSI account to: make DSP accommodations for tests or problem sets or request an assignment extension (see "Late Assignments" below). Email the instructor for personal concerns or disruptions that affect your performance in the course or during an emergency that will result or has resulted in a missed test.

Policies

Lab and data project submission grace period

All labs and data projects, unless stated otherwise, are due on the specified day at 10:00pm. Due to the nature of electronic submission, we understand that some students may experience technical difficulties with submission close to the deadline. Therefore, we are offering a grace period of two hours, until 11:59pm, to account for these submission issues. If you are having issues during this time, please email your submission

to the GSI email at (ph142@berkeley.edu) before 10:30pm. We will not be accepting requests regarding submission errors after 11:59pm on the due date. The grace period applies by default, you do not need to notify us to use it.

Availability for test dates

If you have a conflict with <u>any</u> of the midterm/exam dates, please email the instructor by September 1st so that we can discuss possible accommodations.

Regrades

Grading for this course is done through gradescope to allow blinded grading of questions and to provide consistent rubric information for GSIs and students. Gradescope also allows us to use some AI features to speed up the grading turn- around time. We will do our best to return graded submissions within a week of the due date. While we will do our best to ensure timely and consistent grading, we know that there are possibilities for both human and machine-reading errors. Regrades will be allowed on quizzes and midterm exams, requests for regrades will be open for three school days after the grades are released using Gradescope. Note that if you request reconsideration of a graded question, instructors may reconsider grades on the entire assignment.

Late Submissions

We will allow 50% credit for assignments submitted within 24 hours after the due dates. Extensions can be made for DSP students but should be requested ideally before the due date by emailing the GSI email account. Anyone else requesting an exemption for late submission should email the GSI account explaining their situation. If an emergency event prevents submitting an assignment by the deadline, please contact the GSI email account as soon as reasonably possible, including documentation with your request for extension.

Attendance

We encourage attendance at all synchronous sessions as there are opportunities to ask questions to the instructor during lectures and to the GSIs during lab. We do not require attendance. If you do not attend, it is your responsibility to watch the recordings to stay on top of course material.

Technology

Zoom will be used to conduct lectures and one of the labs. Zoom links will be shared on the calendar embedded on the course website. **You *must* use a Zoom account affiliated with your Berkeley email to access the invite!** Lectures will be recorded each week and one lab section will be recorded each week and made available as soon as possible (there are sometimes delays, we will know more as the term progresses). Students will be muted and their videos turned off by defaults since there are so many of you! I encourage you to ask questions, you can do so by unmuting or by using the chat. If you are more comfortable doing so, you may also send a private chat message. This will be visible to the lecturer but not the class. Feel free to turn on your camera when you ask a question orally. Please note that questions asked are part of the lecture/lab recording.

Communication and community

UC Berkeley School of Public Health has a commitment to cultivating a safe, respectful and inclusive community. You can read more about this in the <u>principles of community</u> <u>statement</u>. Part of fostering this type of community is cultivating respectful communication. We as a teaching team will do our best to communicate in a respectful, compassionate, and professional manner. We ask that you as students do your best to hold these values in your communications with each other and with us.

Questions during lecture and lab are strongly encouraged. If something is unclear to you, it is probably unclear to many others in the room. There may be times, however, when the instructor or the GSI decides that a particular question or discussion is not helpful to the entire class or will take too long to address satisfactorily. In these cases, we may defer the question to be answered after class, on Piazza or during office hours.

We will use **Piazza** for class discussion. The system is highly catered to getting you help fast and efficiently from classmates, the GSIs, and the instructor. In general, you can expect that the GSIs will respond to posted questions within 24 workday hours.

Please do not email course content questions directly to the instructor or GSIs. The instructor and GSIs will not respond to questions about course content by email.

In the interest of supporting work-life balance, the teaching team will not respond to Piazza questions during holidays and breaks. GSIs will respond to Piazza questions up until 24 hours before exams. However, students may continue to post and answer each other's questions during breaks and in the last 24 hours before an exam. Piazza will be inactivated the day of tests.

For questions and concerns that are not related to course content, please email ph142@berkeley.edu. GSIs will do their best to respond to the course email account within 1 business day. Email responses may be slower over weekends and breaks

Anti-racist and inclusive learning environment

Faculty at Berkeley Public Health strive to create an anti-racist learning environment. I commit to teaching this course, to the best of our ability, with an antiracist, racial justice, and equity-minded lens. I'm interested in your perspectives and in the value and knowledge you bring to help make this an enriching course environment.

I view this syllabus as a dynamic document oriented toward learning and not just coverage of material; thus, I may add or modify topics covered, assignments, and resources (e.g., required readings/videos) slightly based on the needs and interests of students in the course. I welcome feedback and input at any time and invite careful reflection of any modifications that may help improve the course in the future.

As your professor I agree to the following:

- I will do my best to include course content that include examples relevant to racialized and minoritized communities (e.g., readings, examples, data).
- I will continue to work to understand the issues, concerns and history of racialized and minoritized students. I will listen, learn, and admit mistakes and engage in ongoing cultural humility practices.
- I welcome feedback at any time during the course without fear of reprisal; if a mid-semester evaluation is conducted, there will be specific language about antiracism teaching practices.
- Students are the experts of their own experiences. Your world lens is welcomed; and as students, you are invited to lift up information and/or data that is relevant to the course material. Everyone is a teacher and everyone is a student.

SPH Course Policies

Descriptions of and relevant campus links to SPH school wide course policies on Disability Support Services, Accommodation of Religions Creed, Course Evaluations, Academic Integrity can be found at:

https://berkeley.box.com/s/knh3rbk9ikgvmca4ymy93msgj9bkebq5

Disabilities: The Disabled Students Program (DSP)

The mission of the Disabled Students' Program (DSP) is to ensure that all students with disabilities have equal access to educational opportunities at UC Berkeley. The DSP offers a wide range of services, accommodations, and auxiliary services for students with disabilities. These services are individually designed and based on the specific needs of each student as identified by DSP's Specialists.

We will accommodate disabled students' needs according to DSP documentation; please notify the DSP if you require such accommodation (DSP will then contact the instructor). Note that this may take several weeks, so please initiate this process ASAP so that any accommodations can be implemented in time for the first midterm exam. Steps to the application process: https://dsp.berkeley.edu/students/new-students.

If you require DSP accommodations for a test, please email the GSI email account at <u>ph142@berkeley.edu</u> with your request and write "DSP accommodation" in the subject heading as soon as you know accommodations are required. If your accommodation

allows for extension on take-home assignments, we ask that you discuss your request no later than 24 hours after the assignment is posted.

Mental Health

If you are experiencing stress, anxiety, or other forms of distress during the semester, we hope to be a resource for you–**please don't hesitate to reach out to a GSI or the Professor for support.** You are not alone.

There are also many resources available to you. All registered Berkeley students are eligible to use Counseling Psychological Services. **You do not have to purchase the Student Health Insurance Plan to use these services.** The first five counseling sessions are free for registered Berkeley students. Counselors can provide support in academic success, life management, career and life planning, and personal growth and development.

UC Berkeley, Counseling and Psychological Services

- Please call (510) 642-9494 or stop by the office on the 3rd floor of the Tang Center to make an appointment with a counselor.
- Drop-in counseling for emergencies: Monday Friday, 10:00AM-5:00PM

- **After hours counseling:** In the case of emergencies at night or on weekends, call (855) 817-5667 for free assistance and referrals. Request to speak with a counselor.
- For emergency support: Call UCPD 911 or (510) 642-3333

24 Hour Crisis Hotlines

- Alameda County Crisis Line: Call 1-800-309-2131 (offers confidentiality, TDD services for deaf and hearing impaired callers and translation in 140 languages)
- National Crisis Help Line: Call 1-800-273-TALK
- Crisis Text Line: Text HOME to 741741
- National HopeLine Network: Call 1-800-SUICIDE

We also ask that you look out for your fellow peers. If you see any of the signs below that may indicate your classmate may need assistance, please use the resources above or reach out to any of the GSIs or Professors.

- Withdrawing from other people
- Changes in weight or eating patterns
- Changes in sleeping patterns
- Fatigue or lack of energy
- Increased anxiety or irritability
- Feeling worthless or hopeless

Other Campus Resources:

- Let's Talk: Informal Drop-In Counseling
- Self-Help Resources
- Be Well at Cal

Academic Honesty

Learning is hard work–we encourage everyone to work together and support one another. However, while group work is encouraged, with the exception of the group project, **students must submit their own code and answers** for grading. Students can not work together on the quizzes, midterm, or final examinations. **Tests that show evidence of academic misconduct will be immediately flagged and reported to the Center for Student Conduct for review.** This can result in a grade of 0 on an assignment or a harder penalty depending on the degree of the offence. Each term, a few students in this class are reviewed by the Center for Student Conduct as we take cheating very seriously.

Berkeley's code of conduct is **here**. See Section V and Appendix II for information about how UC Berkeley defines academic misconduct. In particular, the sections on cheating and plagiarism are most relevant for this class.

If you are not clear about the expectations for writing a test or examination, be sure to seek clarification from the instructors or your GSI beforehand.

Harassment Policy

We are all responsible for creating an environment that is welcoming, civil, safe, and tolerant. UC Berkeley does not tolerate harassment of PH142 students, GSIs, or instructors.

- Instructors and GSIs will act to stop acts of harassment in the classroom.
- Students experiencing harassment can contact the office for the prevention of harassment and discrimination. To file a report, you can email ask_ophd@berkeley.edu or call them at (510) 643-7984. For more information, see: <u>https://ophd.berkeley.edu/</u>.
- Please note that Instructors and GSIs are Responsible Employees and must report incidents of sexual violence and harassment to the Office for Prevention of Harassment and Discrimination. Please see this website for confidential reporting resources:

http://survivorsupport.berkeley.edu/Confidential-Resources-Anonymous-Reportin g-and-Privacy

Mask Policy

All students must wear a mask to lab section or indoor office hours, with the exception of students who have a disability exception. Students not wearing a mask and without an exception will be asked to leave class. Students refusing to leave class will be reported to the Center for Student Conduct.