

PSY 201H1F LEC5101: STATISTICS I

May 8 – June 30 2023

COURSE FORMAT

In Person. Held M+W 6-9pm EST.

Recorded lectures might be posted.

INSTRUCTOR OFFICE HOURS OFFICE EMAIL

Dr. Kirk Geier (He/Him) Mon + Wed 5-5:50pm AH100 or over Zoom by appointment Kirk.Geier@mail.utoronto.ca

Zoom: https://utoronto.zoom.us/j/85648612585 PW: psy201

TA TEAM

Ryan Panela (He/Him) – Monday 11am-12pm -ZOOM: link below

Ariana Youm (She/Her)- Tuesday 10-11am -OFFICE: Sid Smith 627 floor G
Joel Le Forestier (He/Him) – Wednesday 9-10am -OFFICE: Sid Smith 624 floor G

Ann Zhang (She/Her) – Thursday 12-1pm -ZOOM: link below

Johnny Dubois (He/Him) – Friday 2-3pm -OFFICE: Sid Smith 4001 4th floor

Zoom Office hours: https://utoronto.zoom.us/j/82849490101

Meeting ID: 828 4949 0101

Passcode: stats

Course email to email TAs:

Statistics.psy201.uoft@gmail.com

Prerequisites: PSY100H1/PSY100Y5/(PSYA01H3 + PSYA02H3)

EXCLUSIONS: ECO220Y1/EEB225H1/GGR270H1/POL222H1/SOC202H1/STA220H1/STA238H1/STA248H1/STA288H1/PSY201H5/STA215H5/STA220H5/PSYB07H3/STAB22H3/STAB23H3/STAB57H3

It is your responsibility to ensure that you have met all prerequisites listed in the Psychology section of the A&S Calendar for this course. If you lack any prerequisites you will be removed from the course. No waivers will be granted.

COURSE WEBSITE: Quercus, at https://q.utoronto.ca/courses/305414

COURSE MATERIALS (Online Textbook)

Gravetter, F. J., & Wallnau, L. B. (2017). *Statistics for the Behavioral Sciences* (10th Ed.). Boston, MA: Cengage Learning. ISBN: 978-1-337-36622-9 (**required**)

MindTap ® Psychology, ISBN: 978-1-337-28075-4 (required-homework administered via MindTap) * URL and Course Key to be Posted on Quercus

Instructions with video can be found here: https://www.cengage.com/coursepages/UofT_Su23_PSY201

A note about our text: I encourage you to shop around for the best price, but a special UofT price is available at our bookstore – MindTap® alone (which includes an ebook version of the text) can be purchased for \$64.95, and MindTap® bundled with a paperback version of the text can be purchased for \$129.95. In addition, purchasing



MindTap® through the bookstore will come with 12 months of access (compared to the typical 6 months, and for less money!), something to consider if you will be taking Psy202 this Spring or next Summer! Purchase Mindtap Access from the bookstore: https://www.uoftbookstore.com/adoption-search-results?ccid=1410760&itemid=82989.

COURSE COMMUNICATION

- General inquiries related to course content, policies, or assessments should first be posted to the relevant Quercus Discussion Board. TAs and the instructor will monitor the board, but you are welcome to respond to and support your peers as well!
- Scheduling appointments to review content, get study advice, or view tests email TAs directly at Statistics.psy201.uoft@gmail.com
- Personal questions related to illness, accessibility, accommodations, class concerns email the instructor directly at Kirk.Geier@mail.utoronto.ca
- *EMAILS*: Please use a descriptive subject line, a greeting, complete and grammatically correct sentences, and a signature with your full name (in other words, think of email as professional communication). **Please include** "**PSY201 LEC5101**" in the subject line with the topic of your email! We will try to respond to all emails within 2 business days. Finally, we may not respond to emails between the hours of 8pm and 8am.

COURSE OVERVIEW & GOALS

"Statistical thinking will one day be as necessary a qualification for efficient citizenship as the ability to read and write."

- H.G. Wells

Statistical thinking, also called *statistical literacy*, is "understanding statistics well enough to be able to consume the information that [you] are inundated with on a daily basis, think critically about it, and make good decisions based on that information" (Rumsey, 2002). The goals of this class are two-fold: to help you become good statistical citizens, and to lay the foundation of statistical thinking for those of you who will go on to more advanced statistics courses and applications.

By the end of this course, you will be able to¹:

Goal One: Interpret basic statistical results

- Calculate and interpret the meaning of basic measures of central tendency and variability.
- Distinguish between causal and correlational relationships.
- Interpret data displayed as statistics, graphs, and tables.

Goal Two: Apply appropriate statistical strategies to test hypotheses

- Recognize the difference between a research hypothesis and a statistical hypothesis.
- Select and implement an appropriate statistical analysis for a given research design, problem, or hypothesis.
- Identify the correct strategy for data analysis and interpretation when testing hypotheses.
- Recognize the limitations of hypothesis testing and identify some of the remedies recommended by the field. *Goal Three: Apply appropriate statistical and research strategies to collect, analyze and interpret data, and report research findings*
- Select, apply, and interpret appropriate descriptive and inferential statistics.

¹ Adapted from the Undergraduate Learning Goals set forth by Society for Teaching Psychology's 2012 Statistical Literacy Taskforce



- Identify and operationally define variables.
- Limit cause-effect claims to research strategies that appropriately rule out alternative explanations.
- Produce and interpret reports of statistical analyses using APA style.

Goal Four: Distinguish between statistical significance and practical significance

- Distinguish between statistically significant and chance findings in data.
- Calculate and interpret the meaning of basic tests of statistical significance.
- Calculate and interpret the meaning of confidence intervals.
- Calculate and interpret the meaning of basic measures of effect size statistics.
- Recognize when a statistically significant result may also have practical significance.

Goal Five: Evaluate the public presentation of statistics

- Recognize when statistics are presented in an inaccurate or misleading way, either intentionally or unintentionally.
- Assess the validity of statistical conclusions made in popular research reporting (i.e., in blogs or newspapers).

COURSE STRUCTURE

A. LECTURE MATERIAL

This is an *in-person course*, which means that lectures will be held each Monday and Wednesday. I will *TRY* to record each lecture to make available for later review and for those who cannot make it to class. However, I highly encourage you to attend the in person lectures for the real time interactions between you and me, and you and your fellow students.

During the lectures we will introduce and expand on the important concepts of the course, as well as explore real-world applications related to these concepts. I will post lecture slides to Quercus before class. I will aim to post slides enough in advance with the aim that you can print the slides and annotate them during lecture. However, there may always be last minute changes to certain slides. These slides will *not* include all of the information reviewed in the lecture.

ACTIVE ENGAGEMENT

Attending lecture is a great first step toward success, but learning doesn't happen by passively absorbing rogue information from the atmosphere. In order to get the most out of this (or any) class, *active engagement* is key. This may include: participation in learning checks or activities, taking notes on readings and lectures, or even just actually thinking about questions that are posed.

Attendance will not be formally recorded; however, in my experience, deeper engagement with activities is associated with deeper engagement with the material and a more fulfilling class experience. In addition, statistics is a truly cumulative course – it is difficult to be successful in week 5 if you do not give time and energy to weeks 1-4.

FEEDBACK AND REVIEW

While I highly encourage you to ask questions during lecture there will also be a possibility to give feedback via Quercus. At the end of each week, you will have the opportunity to provide feedback about what the 'muddiest' points are of that week. The most common questions can be gone over in class.



B. READING

The textbook is a vital supplement to the lecture content; some assigned chapters will review or expand on what we discuss, while others will expose you to important topics that we will *not* be discussing together. The statistics book will be especially helpful for review and practice outside of class.

Test questions may be on material from the readings, whether it was explicitly covered in lecture or not.

C. INDEPENDENT PRACTICE WITH MINDTAP®

As in most learning contexts, regular practice is critical to your success in this class. Lectures will provide some opportunities to apply concepts that are introduced, but this is not sufficient, neither for test performance nor for long term retention and application (also called *learning*). I selected the MindTap® platform for this class because it provides multiple research-based methods of review that will support you through this course. I strongly recommend you familiarize yourself with the different types of activities and schedule them into your weekly study plan.

The **Problem Sets** will be **graded.**

The remaining types of activities will not be graded (i.e., Mastery Training, End of Chapter Problems, Exam Reviews). However, these practice questions will be extremely valuable in helping you prepare for tests and identifying what you do and do not fully understand.

ASSESSMENT

A. Tests – 70% of course total

There will be 2 term tests and 1 cumulative final exam. The tests will be multiple choice, short answer, and brief essay/computations, and will cover information from both lecture and readings. You should be prepared not only to perform calculations, but to provide definitions and explanations of concepts, make connections (across concepts, across texts, etc.), and apply the material to new situations.

These tests will be in person and completed during class hours. You will be notified which room the midterms will be completed in.

Midterm 1 will count for 20%, Midterm 2 for 20%, and the Final Assessment will count for 30% of your course total.

B. PROBLEM SETS – 12% OF COURSE TOTAL

Using your MindTap® subscription, you will complete Problem Sets for each of the assigned chapters. Problems sets will typically be due the Sunday night *at the end of* the week we cover the assigned chapters; some weeks, there will be multiple problem sets due. Extensions for technical difficulties will only be given in the case of a system-wide error, so make sure you plan accordingly.



C. STATISTICAL LITERACY ASSIGNMENT – 13% OF COURSE TOTAL

As an opportunity to apply what you learn to real-world scenarios, we will engage in a written assignment. You will write a short report and discuss and evaluate statistical claims from the literature. More details of this assignment will be provided later in the term.

D. Programming / R Assignment – 5% OF COURSE TOTAL

DO NOT PANIC! This assignment will have as little challenge as possible.

The main idea is to demystify statistical programming for any students who do not know the very basics of programming. You will learn how to install the software (either R or Python) and run a few basic lines of code so you have the basis to go into more complicated applications if you need to in the future. If there are any obstacles in the completion of this assignment we will be there to support you through it.

Most statistical tests and data visualization in real research or industry will be implemented very easily and effectively with programming so it is a very key career skill.

FINAL GRADE CALCULATION

There are no extra credit opportunities, but fear not: there are plenty of regular credit opportunities!

All final grades will be rounded to the nearest tenth of a percent. Your grade will then be determined by the scale pictured, the official FAS grading scale. Final grades are non-negotiable. Grade changes will be made *only* to correct for grading errors.

Exams (70%)

 $\begin{array}{l} \text{Midterm } 1-20\% \\ \text{Midterm } 2-20\% \\ \text{Final} -30\% \end{array}$

Application (30%)

Problem Sets – 12% *Statistical Literacy Assignment – 13% R Programming Assignment – 5% *Note:* Any grades posted in the Quercus gradebook are posted for your information only, so you can view and track your progress through the course. No grades are considered official, included any posted in Quercus at any point in the term, until they have been formally approved by the Course Instructor at the end of the course.

COURSE POLICIES LATE WORK AND MAKE-UP POLICIES RELIGIOUS ACCOMMODATION

As a student at the University of Toronto, you are part of a diverse community that welcomes and includes students and faculty from a wide range of backgrounds, cultural traditions, and spiritual beliefs. For my part, I will make every reasonable effort to avoid scheduling tests, examinations, or other compulsory activities on religious holy days not captured by statutory holidays. Further to University Policy, if you anticipate missing a major course assessment due to a religious observance, please let me know as early in the course as possible, and with sufficient notice (at least two to three weeks), so that we can work together to make alternate arrangements.



LATE WORK

Late assignments will be penalized by 5% per day, for up to 3 days (i.e. assignments that are submitted 25 hours past the deadline will receive a 10% late penalty).

Assignments will not be accepted after 3 days - you will receive an automatic 0 on these assignments. In the case of extraordinary circumstances, please email me with the appropriate details to set up a time to discuss these on a case-by-case basis.

Extensions will only be granted for rare circumstances and will only be accepted with the accompanying documentation. Please email me at least 72 hours before an assignment is due to request an extension.

I will drop the lowest THREE of your homework problem sets on MindTap at the end of the term.

"Life Happens" Insurance: However, I recognize that sometimes life happens; therefore, I have built some flexibility into the course to allow for illness, other obligations, or other obstacles. NO *questions asked and NO documentation necessary*.

Everyone has a one use 3 day extension to be used for any one assignment (e.g. one week's homework, the programming project, or the statistical literacy assignment). This obviously cannot be used on Tests. Simply email the course email with the subject line: "Life happens insurance: NAME OF ASSIGNMENT" for your 3 day extension.

MISSED TESTS

If you miss a term test or require a short extension, you must submit documentation that demonstrates your inability to complete that assessment (i.e., the ACORN illness self-declaration tool or an email from your college registrar or accessibility counselor). Documentation must be submitted to me via email within 7 calendar days of the missed test. If you do not provide appropriate documentation, you will receive a 0 for the missed test.

As a rule, makeup tests will not be issued. If you miss a term test, your other term test and the final assessment will be *reweighted* to make up the missing chunk of your grade.

If you miss the final exam, you will need to contact your College Registrar to file a petition for late term work (https://www.artsci.utoronto.ca/current/faculty-registrar/petitions) or work out an alternative plan.

ACCOMMODATION FOR PERSONAL REASONS

There may be times when you are unable to complete course work on time due to non-medical reasons. If your "life happens" situation is larger or more extended than the above policy covers, contact me to discuss your situation. I am here to support you and will help make accommodations where reasonable, possible, and in fairness to other students. It is also a very good idea to speak with an advisor in your College Registrar's office; they can support you in requesting extensions or accommodations, and importantly, connect you with other resources on campus for help with your situation.



Plagiarism Detection

Normally, students will be required to submit their course essays to the University's plagiarism detection tool for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the Centre for Teaching Support & Innovation website (https://uoft.me/pdt-faq).

AI Tools

AI tools will be allowed in this course for the completion of assignments. However, the use must be documented in an appendix for each assignment and properly cited. Students are asked to consider the balance between learning new skills in interacting with AI relative to not learning how to complete projects themselves, which is ultimately what you are paying tuition to learn.

GRADE DISPUTE POLICY

24/14 Policy: You must wait for at least 24 hours following the return of an assignment/assessment before bringing a grade concern to me; use this time to reflect upon your performance and grade. Additionally, grade concerns must be brought to my attention within 14 days (2 weeks) of the return of the assignment/assessment (the specific date will be provided upon release of the grades in question). Please write a short paragraph detailing your grade concern (including a) the question(s) in question; b) why you provided the answer you did and where in the course materials you learned this content, and c) why you think the key is incorrect or incomplete and what in the course materials would support your request) and email it to me. Grade disputes are not to be directed to your TAs. Only reasonable and well-justified concerns will be considered, and all decisions are final. By submitting a request, you are consenting to a full regrade of the assignment, and your grade may go up, down, or stay the same.

USE OF COURSE MATERIALS POLICY

Students are free to use all lecture slides and recordings, and other materials for their own use. Students are, however, NOT permitted to share lecture slides or recordings with others not enrolled in this course.

Uploading course materials to the web or shared server is expressly prohibited. Lectures are the intellectual property of the instructor, and the slides and recordings should be respected thus. Specifically, I do not want to discover that a student has put any of my materials into the public domain, has sold my materials, or has given my materials to a person or company that is using them to earn money (this is a real thing that has happened). The University will support me in asserting and pursuing my rights, and my copyrights, in such matters.

HEALTH & WELLNESS

MASKS & OTHER PROTECTIONS

As of the writing of this policy, the University of Toronto no longer requires (<u>though recommends</u>) masks, and no longer requires COVID-19 vaccinations except for students living in residence.

That said, please be respectful of your fellow students. They may be at higher risk or know people who are at high risk which may not be apparent to you. This includes keeping distance, wearing a medical mask (ideally N95), or watching



recorded lectures if you are symptomatic. Please also respect the choices of other students to wear their masks as they could have a variety of reasons for their choice as well (e.g. at high risk or symptomatic).

WHAT HAPPENS IF THE PROFESSOR GETS SICK?

Specific actions will depend on just how sick I get! If I am able to teach synchronously online, we will have a Zoom class. If I am too sick to facilitate a class session, I will post recorded lectures from previous online semesters, if I have one available. If all else fails, I may need to cancel class, because I am only human. I will give you as much notice as I can, and will provide you an updated class plan as soon as I am able – please attend to all Quercus announcements for the most updated information about the course.

WHAT HAPPENS IF A STUDENT GETS SICK?

If you believe you may have been exposed to COVID-19 or believe you are infected, please exercise caution when deciding whether to go to your other classes or otherwise go in public. Rapid antigen tests are still available and useful tools in tracking your infection status.

I understand it may be different in other courses, but please remember that there is sufficient flexibility built into this course to allow you to make choices prioritizing your health and safety and that of others. I want you to feel like you can take care of your health without sacrificing your learning.

Use the <u>Absence Declaration Tool</u> on ACORN anytime you are absent from academic work. Please note, however, that your declaration is NOT automatically sent to your instructors, so you should still follow their preferred procedures for contacting them in case of missed classes, work, or deadlines.

OFFICIAL UNIVERSITY RESOURCES ON COVID PLANNING

- https://www.utoronto.ca/utogether/masks
- https://www.artsci.utoronto.ca/covid19-artsci-student-faqs#vaccines-and-masks-accordion-1
- https://www.utoronto.ca/utogether/covid-19-planning-update



WELLNESS STATEMENT

As your professor, I value your health and well-being. In order to succeed in my class, in university, and beyond, you must work hard AND balance the work with rest... and attention to your mental and physical health. Yes, I plan to challenge you, but if it weren't hard you wouldn't be proud of it.

However, this work cannot be at the expense of your well-being. Working until exhaustion is NOT a badge of honour; it shows you are out of balance.

STUDENT RESOURCES

Peer Support: Connect with Your Classmates!

Recognized Study Groups: I encourage everyone to strongly consider joining or leading a study group. The Faculty of Arts and Science has a Recognized Study Groups (now fully online!) program that can help you facilitate this (particularly useful if you don't know anyone else in the class!). If you become a study group leader, you can also receive co-curricular credit. To learn more about the program and join or start a study group visit: https://sidneysmithcommons.artsci.utoronto.ca/recognized-study-groups/

Meet To Complete (MTC) Program: New this year, Meet to Complete drop-in sessions allow students across academic disciplines to work alongside peers to support motivation and community, set goals with the support of a student staff member, and earn a CCR credit after participating in 6 MTC sessions. Learn more by visiting: https://sidneysmithcommons.artsci.utoronto.ca/meet-to-complete/

Quercus Discussion Board: You are encouraged to both ask AND answer questions about course content and administration on the course discussion board. The TAs and course instructor will also monitor this board and provide answers or input when needed. For example, if you have any questions about the content presented in this syllabus, the discussion board is a perfect place to ask for clarification - that way everyone can benefit from the response. Before posting a question, please check to see whether it has already been answered/discussed.

Other Campus Resources

Accessibility Services (AS): Students with diverse learning and needs are welcome in this course. If you have an ongoing disability issue or accommodation need, you should register with Accessibility Services (AS) (http://accessibility.utoronto.ca) at the beginning of the academic year. Without registration, you will not be able to verify your situation with your instructors, and instructors will not be advised about your accommodation needs. AS will then assess your medical situation, develop an accommodation plan with you, and support you in requesting accommodation for your course work. Remember that the process of accommodation is private: AS will not share details of your condition with any instructor, and your instructors will not reveal that you are registered with AS.

Mental Health and Well-Being: As a student, you may experience a range of challenges that can interfere with learning, such as strained relationships, increased anxiety, substance use, feeling down, difficulty concentrating and/or lack of motivation. These factors may affect your academic performance and/or reduce your ability to participate fully in daily



activities. All of us benefit from support and guidance during times of struggle. There are many helpful resources available through your college Registrar or through Student Life (for example, http://www.studentlife.utoronto.ca/hwc or https://www.studentlife.utoronto.ca/feeling-distressed). An important part of the University experience is learning how and when to ask for help. Please take the time as early as possible to inform yourself of available resources and do not hesitate to seek assistance from your Teaching Assistant or the Course Instructor to help learn what supports are available.

Academic Success Centre: "Academic Success professional staff are dedicated to helping you reach your highest learning potential. Every student is capable of achieving academic excellence, but not all learning takes place in the classroom, and not everyone learns in the same way. Your life is more complex than your academic responsibilities, so [they] look at the whole picture and take an individualized approach to supporting you. [They] know there is no 'right' way to get through university, and [they] welcome the opportunity to explore strategies that might help you find greater balance between life and learning." Check out their study spaces, attend a workshop or meet with a learning strategist here: https://www.studentlife.utoronto.ca/asc/about-us

English Language Resources: For anyone who would like to advance their understanding and command of English, there are many supports available at UofT. Two examples are:

http://www.artsci.utoronto.ca/current/advising/ell/resources-for-students

And http://www.writing.utoronto.ca/advice/further-resources/online-esl-resources. Your College Registrar will also be able to direct you to other resources.

Writing: As a student here at the University of Toronto, you are expected to write well (yes, even in a statistics class!). The university provides its students with a number of resources to help them achieve this. For more information on campus writing centres and writing courses, please check in with your College Registrar or visit http://www.writing.utoronto.ca/

Accessing the Course from Mainland China: https://isea.utoronto.ca/services/vpn/

A NOTE ON TAKING NOTES

Research indicates that taking notes by hand results in significantly better retention of conceptual information than taking notes on a laptop, and this is partially explained by the necessity of summarizing and paraphrasing in order to take notes by hand and keep up with the lecture (see Mueller & Oppenheimer, 2014). However, a recent study indicates that even more important than the note-taking method is the presence of *digital distractions* (off-task texting or browsing) – digital distractions were a meaningful predictor of both note quality and learning and were especially disruptive to laptop note takers (Flanigan & Titsworth, 2020). So, what does this mean?

- 1. Well, I recommend trying to take notes longhand (i.e., on paper), especially if you haven't tried it in awhile.
- 2. Whether you take notes on paper or on a laptop, be mindful of process. In other words, as tempting as it can be, don't write everything down word-for-word! Be careful to select key points, write things in your own words, and to organize your notes all of these things will help you better learn the material and be able to retrieve it more effectively on later tests.
 - **a.** Note Taking 101 from Oregon State University
 - **b.** Note taking styles
 - i. One specific note-taking style to try: Cornell Notes
 - ii. Not sure which to try? Here are a bunch of templates!



- 3. Regardless of method, minimize distraction as much as possible. Close all other browser windows and turn off notifications on your phone, if possible.
 - **a.** https://getcoldturkey.com/
 - i. Can block yourself out of certain websites, the entire Internet, apps, etc., during specific time windows (e.g., when you have a class!)
 - **b.** http://selfcontrolapp.com/ (for Mac users)
 - **c.** StayFocusd (Google Chrome extension)
 - i. Limits time spent on distracting websites
 - **d.** Freedom (available in the app store) same idea, works on your iPhone, iPad
 - **e.** Forest (https://forestapp.cc/, available for Android and Apple and as a Chrome extension) While the app is open and you're focusing on your work, a tree grows!
 - **f.** https://www.boomeranggmail.com/
 - i. If you use Gmail and email is a major distraction during class/studying pause your inbox! 4. If you need to take a break or you find you aren't focusing well, don't try to multitask while listening to lecture, just press pause and come back when you can! (Just make sure to come back) This is one of the major benefits of asynchronous online learning, shaping it to fit your patterns and schedule.

A WORD ABOUT ACADEMIC INTEGRITY

All students, faculty and staff are expected to follow the University's guidelines and policies on academic integrity. For students, this means following the standards of academic honesty when writing assignments, collaborating with fellow students, and writing tests and exams. Ensure that the work you submit for grading represents your own honest efforts. Plagiarism—representing someone else's work as your own or submitting work that you have previously submitted for marks in another class or program—is a serious offence that can result in sanctions. Speak to me or your TA for advice on anything that you find unclear. To learn more about how to cite and use source material appropriately and for other writing support, see the U of T writing support website at http://www.writing.utoronto.ca. Consult the Code of Behaviour on Academic Matters for a complete outline of the University's policy and expectations. For more information, please see https://www.artsci.utoronto.ca/current/academic-advising-and-support/student-academic-integrity and http://academicintegrity.utoronto.ca

Advice for Course Success

It is important for all students to realize that there will be a distribution of grades in this class that reflects your mastery of some very technical and often-challenging concepts. Remember that your grade in this course is not a reflection of your general ability or your character.

This is a difficult, but not impossible course; it is my hope that you will find this class challenging but rewarding in terms of the knowledge you will walk away with. If you anticipate having difficulty (or when you are), I strongly urge you to do the following:

• Attend every lecture, and take good notes. While attendance will not be graded, the ability to truly learn and use the material in this class is strongly related to regular encounters with it, through lectures, videos, and readings.



- Review lecture notes shortly after writing them for the first time; compare these to the slides. If you need clarification on anything, ask in the weekly survey or post on the discussion board. Don't wait until right before the exams! Reorganizing and combining this information can help you consolidate and remember it.
- Manage your time wisely. Familiarize yourself with the syllabus, put important dates in your calendars now, and space out your work there is just too much to do it at the last minute! This is especially important now, with many classes moved online.
- Use the resources available to you that includes your course materials (especially this syllabus), the TAs, me, and the many amazing services offered on campus.
- Discuss the material with another student. Form a study group. Go to office hours. Ask the TA questions. Ask me questions. ASK QUESTIONS.

More resources here on studying... On time management... On hosting a remote study group...On prioritizing...



CLASS CALENDAR – May-June 2023

Tentative schedule; I reserve the right to adjust this timeline based on course progress

MOD	DATE	Торіс	READING	ASSIGNMENTS	OTHER NOTES				
0	05/8	WELCOME TO THE COURSE		SIGN UP FOR MINDTAP	If you signed up for >1 "Stats 1" courses, please make a choice asap and drop one. This will allow students on the waitlist to get in!				
FOUNDATIONS /DESCRIPTIVE STATISTICS									
1	05/10	VARIABLES & MEASUREMENT	Сн 1	CH 1 PROBLEM SET DUE SUN May 14 11:59PM					
2	05/15	Frequency Distributions	Сн 2	CH 2 PROBLEM SET DUE SUN May 21 11:59PM					
3	05/17	CENTRAL TENDENCY AND VARIABILITY	Сн 3/4	CH 3/4 PROBLEM SETS DUE SUN May 21 11:59PM					
	05/22	NO CLASS, Holiday							
4	05/24	Z-Scores, Probability, & The Normal Curve	Сн 5/6	CH 5/6 PROBLEM SETS DUE SUN May 28 11:59PM					
	05/29	MIDTER							
INFERENTIAL STATISTICS									
6	05/31	SAMPLING & INTRODUCTION TO HYPOTHESIS TESTING	Сн 7/8	CH 7/8 PROBLEM SETS DUE SUN June 4 11:59PM					
7	06/5	Hypothesis Testing with the T Statistic	Сн 9	CH 9 PROBLEM SET DUE SUN June 11 6 11:59PM					
7	06/7	T-Tests with 2 Samples	Сн 10/11	CH 10/11 PROBLEM SETS DUE SUN June 11 11:59PM					
,	00/7	1-1ESIS WITH 2 SAMPLES	CH 10/11	R Intro Assignment Due Sun June 11 11:59pm					
	06/12	Midter							



				CH 12 PROBLEM SET DUE SUN June 18 11:59PM		
8	06/14	HYPOTHESIS TESTING WITH MORE THAN 2 GROUPS: ANOVA	Сн 12			
				STAT LIT - ASSIGNMENT		
				Tues June 20 11:59PM		
9	06/19	HYPOTHESIS TESTING WITH CORRELATION; WRAPPING UP	Сн 15	CH 15 PROBLEM SET DUE		
				Tues June 20 11:59PM		
FINALS	June 21-26	CUMULATIVE FINAL WILL BE SOME DAY WITHIN THIS RANGE (Not Sunday)				