STA 210   SCHEDULE   **SYLLABUS**   SAKAI   GRADESCOPE   HELP

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Syllabus

Click here to download a PDF copy of the syllabus.

Course Learning Objectives

By the end of the semester, you will...

- know methods for analyzing multivariate datasets, with an emphasis on interpretation

- know how to check whether proposed statistical models are appropriate for given data

- develop proficiency in addressing complex research questions using statistical evidence

- develop proficiency in computing tools used to conduct reproducible statistical analyses, specifically R and Git

- understand the process of data-based research by working on an independent research project

Duke Community Standard

As a student in this course, you have agreed to uphold the Duke Community Standard as well as the practices specific to this course.

- I (like many people) am still in the process of learning about diverse perspectives and identities. If something was said in class (by anyone) that made you feel uncomfortable, please talk to me about it.

Accessibility

If there is any portion of the course that is not accessible to you due to challenges with technology or the course format, please let me know so we can make accommodations.
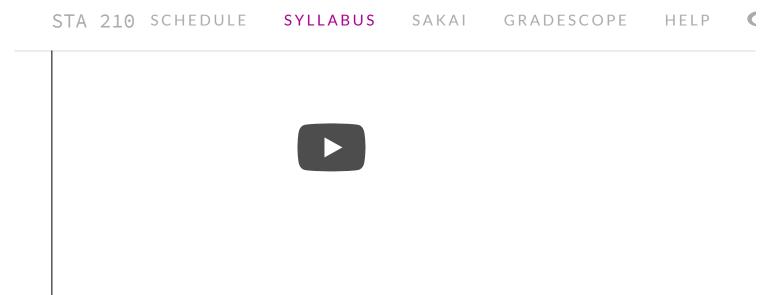
In addition to accessibility issues experienced during the typical academic year, I recognize that remote learning may present additional challenges. Students may be experiencing unreliable wi-fi, lack of access to quiet study spaces, varied time-zones, or additional responsibilities while studying at home. If you are experiencing these or other difficulties, please contact me to discuss possible accommodations.

The Student Disability Access Office (SDAO) is available to ensure that students are able to engage with their courses and related assignments. Students should be in touch with the Student Disability Access Office to request or update accommodations under these circumstances.

Academic honesty

TL;DR: Don't cheat!

Please abide by the following as you work on assignments in this course:

Inclusive community

It is my intent that students from all diverse backgrounds and perspectives be well-served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that the students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of diversity and in alignment with Duke's Commitment to Diversity and Inclusion. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally, or for other students or student groups.

Furthermore, I would like to create a learning environment for my students that supports a diversity of thoughts, perspectives and experiences, and honors your identities. To help accomplish this:

- If you feel like your performance in the class is being impacted by your experiences outside of class, please don't hesitate to come and talk with me. If you prefer to

unauthorized materials will be considered a violation
for all students involved. More details will be given
closer to the exam date.

- **Reusing code**: Unless explicitly stated otherwise, you
  may make use of online resources (e.g. StackOverflow)
  for coding examples on assignments. If you directly use
  code from an outside source (or use it as inspiration),
  you must explicitly cite where you obtained the code.
  Any recycled code that is discovered and is not
  explicitly cited will be treated as plagiarism.

- On individual assignments, you may not directly share
  code or write up with other students. On team
  assignments, you may not directly share code or write
  up with another team. Unauthorized sharing of the
  code or write up will be considered a violation for all
  students involved.

Any violations in academic honesty standards as outlined in
the Duke Community Standard and those specific to this
course will automatically result in a 0 for the assignment
and will be reported to the Office of Student Conduct for
further action.

Communication

All lecture notes, assignment instructions, up-to-date
schedule, and other course materials may be found on the
course website, https://sta20-fa20.netlify.app .

I will also email announcements through Sakai periodically
to ensure everyone has the current information. Please

Getting Help

- If you have a question during lecture or lab, feel free to ask it! There are likely other students with the same question, so by asking you will create a learning opportunity for everyone.

- The teaching team is here to help you be successful in the course. You are encouraged to attend office hours during the times posted on the home page to ask questions about the course content and assignments. A lot of questions are most effectively answered in-person, so office hours are a valuable resource. Please use them!

- Outside of class and office hours, any general questions about course content or assignments should be posted on Piazza. There is a chance another student has already asked a similar question, so please check the other posts on Piazza before adding a new question. If you know the answer to a question posted on Piazza, I encourage you to respond!

Check out the Help tab for more information about getting help and resources.

Activities & Assessment

The following activities and assessments will help you successfully achieve the course learning objectives. By experiencing the course content in different ways, you will

apply what you've learned in future academic and
professional projects.

A Week in STA 210!

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY
Lectures	Live session 3:30p - 4:45p	Watch content videos	Live session 3:30p - 4:45p	
App. Ex. (AE)		Mon's AE due		Wed's AE due
Labs			Lab due	Attend lab / start new lab

Lectures will have two components:

- **Lecture content videos**: These are pre-recorded
  videos that contain the content. You can think of these
  as a "video textbook". You should watch the content
  videos before we meet for the live sessions.

- **Live lecture sessions**: These sessions will be on Zoom
  Mondays and Wednesdays 10:15a - 11:30a. During
  this time, we will answer questions from the live
  lecture videos and most of the time will be used to
  work on exercises where you apply the material from
  the content videos.

Labs

In labs, you will apply the concepts discussed in lecture to
various data analysis scenarios, with a focus on the

equally to the completion of each assignment. You are expected to use the team's Git repository on the course's GitHub page as the central platform for collaboration. Commits to this repository will be used as a metric of each team member's relative contribution for each lab, and you will also be asked to evaluate your team members' engagement periodically during the semester. Lab assignments will be completed using R Markdown, correspond to an appropriate GitHub repository, and submitted as a .pdf file to Gradescope.

Sections 01L - 03L: If you are in one of these sections, you are expected to attend lab during the scheduled time. You will spend most time working with your team to complete that week's assignment. There will be teaching assistants available if you have questions as you work.

Section 04L: Though you do not have a scheduled lab time, you will find a time with your team to work on the weekly lab assignment. The teaching team will provide tips and resources to help you establish a plan for collaboration. You will be able to ask questions during office hours and on Piazza.

To accommodate unexpected events, the lowest lab grade will be dropped at the end of the semester for all students.

Homework

In homework, you will apply what you've learned during lecture and lab to complete data analysis tasks. You may discuss homework assignments with other students; however, homework should be completed and submitted

Individual homework extensions will only be given for extenuating circumstances. Please contact Professor Tackett if you have an extenuating circumstance that prohibits you from completing the homework by the stated due date.

To accommodate unexpected events, the lowest homework grade will be dropped at the end of the semester.

Quizzes

There will be four quizzes during the semester. The quizzes are an opportunity to assess the knowledge and skills you've learned. They will include both the conceptual and mathematical and conceptual aspects of regression. Quizzes will be timed and must be completed during the time period specified.

Quiz dates cannot be changed and no make-up quizzes will be given. If extenuating circumstances prohibit you from taking a quiz, please let Professor Tackett know before the start of the quiz.

Final Project

The purpose of the project is to apply what you've learned throughout the semester to analyze an interesting data-based research question using regression. The project will be completed with your lab teams, and each team will present their work in video and in writing during the final exam period. More information about the project will be provided a few weeks into the semester.

give you an opportunity to practice using the statistical concepts and/or code discussed in lecture on short data analyses. AEs will be linked in lecture slides and time will be set aside during the optional live sessions to work on them. These AEs are due by the end of the next day; for instance, an AE associated with a lecture on Monday will be due Tuesday at 11:59p. AEs will be graded based on a good-faith effort has been made in attempting all parts. Successful on-time completion of at least 90% of AEs will result in full points for AEs; anything lower than that will be assigned points accordingly.

In addition to AEs will be periodic activities help build a learning community. These will be short, fun activities that will help everyone in the class connect throughout the semester.

The last component of participation will be based on periodic team feedback about each team member's overall contribution to labs and the project.

Statistics Experiences

During the course of the semester, there will be periodic opportunities for you to experience statistics and data science outside of the classroom. The goal of these experiences are for you to think about how the material you're learning in the course can connect with your experiences and society at large.

Grading

CATEGORY	PERCENTAGE
Quizzes	35%
Homework	25%
Labs	15%
Final Project	15%
Participation	5%
Stats Experience	5%

The final letter grade will be determined based on the following thresholds:

LETTER GRADE	FINAL COURSE GRADE
A	>= 93
A-	90 - 92.99
B+	87 - 89.99
B	83 - 86.99
B-	80 - 82.99
C+	77 - 79.99
C	73 - 76.99
C-	70 - 72.99
D+	67 - 69.99
D	63 - 66.99
D-	60 - 62.99

F   < 60

Late Work

You will have a 24 hour grace period after the due date of homework and lab assignments to turn them in with no penalty. I recommend using this policy as little as possible, but they are there to provide some relief and to accommodate multiple time zones. After the grace period, there is a 20% penalty for each day the assignment is late.

If there are extenuating circumstances that prevent you from completing an assignment by the stated due date, please let Professor Tackett know as soon as possible.

Late work will not be accepted for the quizzes or the final project

Regrade Requests

Regrade requests should be submitted through the regrade request from on Gradescope. **Requests for a regrade must be made within a week of when the assignment is returned; requests submitted later will not be considered.** You should only submit a regrade request if there is an error in the grade calculation or a correct answer was mistakenly marked as incorrect. You should not submit a regrade to dispute the number of points deducted for an incorrect response. *Please note that by submitting a regrade request, your entire assignment may be regraded and you may potentially lose points.*

Due to the time consuming nature of responding to regrade requests, you should attend office hours and ask a member

which member of the teaching team you spoke with. *Note: Grades can only be changed by Professor Tackett. Teaching Assistants cannot change grades on returned assignments.*

No grades will be changed after the final project presentations.

Additional resources

Academic Resource Center

There are times may need help with the class that is beyond what can be provided by the teaching team. In those instances, I encourage you to visit the Academic Resource Center. The Academic Resource Center (ARC) offers free services to all students during their undergraduate careers at Duke. Services include Learning Consultations, Peer Tutoring and Study Groups, ADHD/LD Coaching, Outreach Workshops, and more. Because learning is a process unique to every individual, they work with each student to discover and develop their own academic strategy for success at Duke. Contact the ARC to schedule an appointment. Undergraduates in any year, studying any discipline can benefit! Contact ARC@duke.edu, 919-684-5917.

CAPS

Duke Counseling & Pyschological Services (CAPS) helps Duke Students enhance strengths and develop abilities to successfully live, grow and learn in their personal and academic lives. CAPS recognizes that we are living in

impacted everyone, often in ways that are tax our well-being. CAPS offers many services to Duke undergraduate students, including brief individual and group counseling, couples counseling and more. CAPS staff also provides outreach to student groups, particularly programs supportive of at-risk populations, on a wide range of issues impacting them in various aspects of campus life. CAPS provides services to students via Telehealth. To initiate services, you can contact their front desk at 919-660-1000.

Important dates

- **Aug 17**: Classes begin

- **Aug 28**: Drop/add ends

- **Oct 30**: Last day to withdraw with W

- **Nov 16**: Classes end

- **Nov 21**: Final exam period, 9a - 12p