

Welcome to Regression Analysis!

Prof. Maria Tackett

Welcome!

What is regression analysis?

"In statistical modeling, regression analysis is a set of statistical processes for estimating the relationships among variables. It includes many techniques for modeling and analyzing several variables, when **the focus is on the relationship between a dependent variable and one or more independent variables (or 'predictors')**. More specifically, regression analysis helps one understand how the typical value of the dependent variable (or 'criterion variable') changes when any one of the independent variables is varied, while the other independent variables are held fixed."

[-Wikipedia](#)

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- How to address complex research questions using regression analysis
- How to use R and Git to do statistical analysis in a reproducible way
- The process for conducting data-driven research by applying the methods from this course to a long-term project

Where to find information

Course website: sta210-fa20.netlify.app

- Central hub for the course!

Sakai

- Gradebook
- Class videos
- Link to class meetings on Zoom

GitHub: <https://github.com/sta210-fa20>

- Assignment repos (we'll talk more about that later)

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- Has two components:
 - **Lecture content videos** to watch before we meet
 - **Live lecture session** to ask questions and apply concepts from videos

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Lab

- Focus on computing using R
- Apply concepts from lecture to case study scenarios
- Work on labs individually or in teams of 3 - 4

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- **Statistics Experiences:** Engage with statistics outside of the classroom and reflect on your experience.

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- Use email for questions regarding personal matters and/or grades.

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.

Contact the ARC at ARC@duke.edu or call 919-684-5917 to schedule an appointment.

CAPS

Duke Counseling & Psychological Services (CAPS) helps Duke Students enhance strengths and develop abilities to successfully live, grow and learn in their personal and academic lives.

Services include

- brief individual and group counseling
- couples counseling
- outreach to student groups
- and more...

Services provided via Telehealth. To initiate services, you can contact their front desk at 919-660-1000.

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