# Welcome to Regression Analysis!

### Prof. Maria Tackett



### **<u>Click for PDF of slides</u>**



### 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."







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- Use R Markdown to write reproducible reports and GitHub for version control and collaboration.
- Communicate results from statistical analyses to a general audience.



### Where to find information

Course website: <a href="mailto:sta210-sp21.netlify.app">sta210-sp21.netlify.app</a>

Course materials and schedule

#### Sakai

- Gradebook
- Link to class meetings on Zoom

#### See the Tour of course website + Sakai video

#### GitHub: <a href="https://github.com/sta210-sp21">https://github.com/sta210-sp21</a>



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

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- Has two components:
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  - Live lecture session to ask questions and work on exercises to apply concepts from content videos



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### Lab

- Focus on computing using R
- Apply concepts from lecture to case study scenarios
- Most labs will be in teams of 3 4



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- **Final Project**: Team project presented during the final exam period.
- Application Exercises: Exercises completed during the live lecture session.





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- See the <u>Resources</u> page for computing and statistics resources and academic and wellness support resources
- Use email for questions regarding personal matters and/or grades.



## **Academic Resource Center**

The <u>Academic Resource Center (ARC</u>) 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 <u>ARC@duke.edu</u> or call 919-684-5917 to schedule an appointment.



### CAPS

<u>Duke Counseling & Psychological Services (CAPS)</u> 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.



### sta210-sp21.netlify.app

