# DATA1901 LAB01

# TOPIC ONE


WELCOME TO DATA SCIENCE

# ABOUT US

» What are you studying?

» What languages do you speak? (verbal and coding)

» When you first started coding in R, how did you find it?

# ABOUT YOU

» What is your major / degree?

» What languages do you speak? (verbal and coding)

» What are you most excited for in university?

» http://tiny.cc/vlpouz

» Swap contact details / start a group chat

TOPICS


Topic 1
Design of Experiments

Topic 2
Data and Graphical Summaries

Topic 3
Numerical Summaries


Topic 4
Normal Model

Topic 5
Linear Model


Topic 6
Understanding Chance

Topic 7
Chance Variability (The Box Model)

Topic 8
Sample Surveys


Topic 9
Hypothesis Testing

Topic 10
Tests for Mean

Topic 11
Tests for Relationship

# Topic Overview

## Imagine

Approx. 20min

## Discover

Approx. 3hr

## Challenge

Approx. 1hr

## Explore

Approx. 1hr

## Evaluate

Approx. 2hr


CHALLENGE

# KEY IDEAS

- Ethics and Privacy
- Statistical thinking
- Randomised Controlled Trial (RCT) vs Observational Study
- Domain knowledge
- Confounders
- Precautions with observational studies

# GROUP WORK

# TAKE A BREAK


EXPLORE

R

# REMINDERS

» Add your group members on socials / email

» Work through the extra practice in challenge

» Complete the evaluate quiz

» Go to the evaluate lecture on Friday