

# About this course

Stat 33A: Intro to Programming in R

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Intro

# Welcome to Stat 33A



# STAT 33A





STAT 33B

# About Stat 33A

- ▶ **Audience:** students with **no** programming experience
- ▶ **Know already:** basic algebra, arithmetic
- ▶ **Emphasis:** variables, if-statements, loops, functions
- ▶ **Goal:** that students finish the course with the skills necessary for conducting a typical data analysis or implementation of a simple algorithm.

# About Stat 33B

- ▶ **Audience:** students with previous programming experience (not necessarily in R)
- ▶ **Know already:** variables, if-statements, loops, functions.
- ▶ **Emphasis:** details about how R works at a lower level.
- ▶ **Goal:** that students finish the course with the skills necessary to help develop and maintain software in R.

## 33A -vs- 33B (analogy)

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### 33A

know the main parts of a bike  
learn to ride a bike  
how to pedal  
how to break  
how to switch gears  
fix a flat

### 33B

know the ins-&-outs of a bike  
you already know how to ride a bike  
types of pedals  
types of breaks  
how to tune a bike  
how to assemble a bike

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# Course Logistics

# Course Format

- ▶ **Lecture:** conceptual stuff, demos, case studies, examples, review some code
- ▶ **Lab:** practical work using R
- ▶ **Homework:** follow the work of labs, plus some challenges

## Workload and grading scheme

Description	How Many	Frequency	Drops	Weight
Labs	11*	Every week	lowest	10%
HWs	6	Every 2 weeks	none	60%
Quizzes	2	Every 2 HWs	none	8%
Final exam	1	Once	none	22%

(\*) labs 1 and 4 ungraded

# My Expectations

- ▶ I don't expect that you'll become fluent in R (as with any language, that takes years of practice, practice, and practice)
- ▶ Instead: expose you to the common vocabulary and idioms in R
- ▶ Also, teach you some of the core principles that govern R's behavior
- ▶ And to give you recommendations for avoiding common coding pitfalls in R

# Waitlisted Students

- ▶ Must do all coursework and complete assignments by the deadlines.
- ▶ You'll be enrolled if there is space in your lab.
- ▶ Enrollment will proceed by CalCentral.
- ▶ We won't increase enrollment.

## Concurrent Students (e.g. BISP, exchange, etc)

- ▶ Must do all coursework and complete assignments by the deadlines.
- ▶ We will add you to bCourses.
- ▶ If there is available space, we will approve your application.
- ▶ The approval process is a 2-step process (it takes time).
- ▶ We won't increase enrollment.