

# STAT 100A: Introduction to Statistics

Joyce (Yingzhuo) Fu

## Basics

- Lecture: MWF Time 1:00pm - 1:50pm
- Instructor: Joyce (Yingzhuo) Fu , yfu001@ucr.edu,
- Instructor Office Hours: M, W, F 11:10 am - 12:50 pm or by appointment

## Textbook

Diez, Barr, Cetinkaya-Rundel, OpenIntro Statistics, 4th Edition, 2019. The textbook is freely available online. You're welcomed to read on screen or print it out. If you prefer a paperback version you can buy it at the cost of printing (around \$20) on Amazon. The university bookstore will not carry copies of this text.

## Description

This class is an introduction to descriptive and inferential statistics. Topics include histograms; descriptive statistics; probability; sampling distributions; hypothesis testing; and confidence intervals.

## Tips for Success

0. Consider the instructor and TAs as helpers of your learning. You are the center of the whole learning process.
1. View the course materials/notes/textbook before lectures, labs and discussions.
2. Be an active participant during lectures, labs and discussions.
3. Ask questions - during lectures, labs and discussions, in office hours, or by email. Ask me, your TAs, and your classmates.
4. Do the homework exercise - start early and make sure you attempt and understand all questions.
5. Give yourself plenty of time to prepare for exams. This requires going through the material and taking the time to review the concepts that you're not comfortable with.
6. **DO NOT PROCRASTINATE** - don't let a unit go by with unanswered questions as it will just make the following unit's material even more difficult to follow.

## Grading

Item	Percentage
Homework	15%
Discussion Attendance	5%
Labs	15%
Quizzes	15%
Midterm (2/7 Wk5 Fri)	20%
Final	30%
Bonus	5%

Grades may be curved at the end of the semester. Cumulative numerical averages of 90-100 are guaranteed at least an A-, 80-89 at least a B-, and 70-79 at least a C-. However the exact ranges for letter grades will be determined after the final exam. The more evidence there is that the class has mastered the material, the more generous the curve will be.

## Work Load and Teamwork

You are expected to put in about 0.5 - 1 hours of work / day outside of class. Some of you will do well with less time than this, and some of you will need more. You are encouraged to study with your classmates. But remember that anything that is not explicitly a team assignment must be your own work.

## Homeworks

These will be assigned (approximately) weekly and will be comprised of problems from the textbook. Each assignment will list roughly five problems from the book to be turned in for grading.

The objective of the homework exercises is to help you develop a more in-depth understanding of the material and help you prepare for exams. Grading will be based on completeness as well as accuracy. In order to receive credit you must show all your work.

You are welcomed, and encouraged, to work with each other on the problems, but you must turn in your own work. If you copy someone else's work, both parties will receive a 0 for the homework grade as well as being reported to the Student Conduct & Academic Integrity Programs (SCAIP).

**Submission instructions:** You will turn in your **homework before discussion**. Late homework will be accepted. *Lowest score will be dropped.*

## Labs

The objective of the labs is to give you hands on experience with data analysis using modern statistical software. We will use a statistical analysis package called RStudio, which is a front end for the R statistical language. R and RStudio are both free and widely used among the statisticians and data scientists. You are welcomed to install them on your laptop and play with them when necessary. *Lowest score will be dropped.*

## Policies

- You are responsible for checking announcements and accessing course materials on iLearn.
- Late work policy for the homework and labs reports:
  - next day: lose 30% of total possible points
  - later than next day: lose all points
- There will be no make-ups for homework, labs, quizzes, or exams. If the midterm exam must be missed, absence must be officially excused **in advance**, in which case the missing exam score will be imputed using the final exam score. This policy only applies to the midterm. All other missed assessments will receive a grade of 0. The final exam must be taken at the stated time. You must take the final exam to pass this course.
- Please be considerate of your classmates by arriving on time. If you arrive after at least one student has finished the exam and left the room, you will NOT be allowed to sit for the exam, and will receive a "0". Turn off cell phones before entering the exam room. If your cell phone rings during the exam, you will lose points on the exam.

- Use of disallowed materials (textbook, class notes, web references, any form of communication with classmates or other persons, etc.) during exams will not be tolerated. This will result in a 0 on the exam for all students involved, possible failure of the course, and will be reported to the Student Conduct & Academic Integrity Programs (SCAIP). If you have any questions about whether something is or is not allowed, ask me beforehand.