

# Stats 7 - Basic Statistics

## Summer Session II - 2022

**Lecture:** In person Tuesdays and Thursdays 1 - 3:50 pm in ICS 180

**Discussion:** Wednesdays 4 - 4:50 pm in DBH 1500

**Learning mode:** Flipped (i.e. Lecture videos will be watched before class and class time will be used to practice applying the material)

**Instructor:** Catalina Medina (she/her/hers) [catalmm1@uci.edu](mailto:catalmm1@uci.edu)

**Instructor office hours (OH):** Mondays 10 - 11am on Zoom (Find Zoom link on Canvas)

**TA:** Roy Zhao [nzhao3@uci.edu](mailto:nzhao3@uci.edu)

**TA office hours:** Fridays 3 - 4pm on Zoom (find Zoom link on Canvas)

### Course description:

This course will provide an introduction to fundamental statistics concepts. Statistical methods will be discussed with an emphasis on data-based critical thinking and decision making. Key to statistics is the ability to clearly convey findings in context, including uncertainty. Using statistics to learn from data is necessary for nearly every field.

### Learning objectives:

Upon successful completion of the course, students should be able to:

- identify basic patterns and limitations of empirical data
- conduct hypothesis tests for population parameters
- check model assumptions
- evaluate the significance of their findings and the strength of the evidence
- present their analysis and findings in context without statistical jargon

### Materials:

This course will use the free open access textbook:

OpenIntro Statistics (4th edition) by David Diez, Mine Cetinkaya-Rundel, and Christopher D Barr  
<https://www.openintro.org/book/os/>

We will use the R software for reading in data and performing computations. You will need to install [R](#) and then [RStudio](#).

The class website will contain the class syllabus, schedule, and links to all material.

Homework will be submitted to Gradescope. Gradescope can be accessed through Canvas.

Canvas will be used for class communication, lecture video quizzes, and grades.

**Communication expectations:**

We will use the Canvas discussion board as the primary mode for communication. This is the quickest way to get questions answered because the instructor, TA, and students can all contribute to discussion posts. For student-specific questions, the instructor or TA can be reached by email.

**Grading breakdown by assignment type:**

Assignment:	Percentage of final grade:	Due:	Location:
Lecture video quizzes	15%	11:59 pm PT Mondays and Wednesdays	Online on Canvas
Homeworks	30%	11:59 pm PT Tuesdays	Online on GradeScope
Discussion quizzes	25%	4:50 pm PT Wednesdays	In person in discussion
Final exam	30%	3:50 pm PT Sep. 6th	In person in lecture

Grades will not be curved and will not be rounded. We will use the following grading scheme:

A- [90, 93), A [93, 96), A+ [96, 100),  
B- [80, 83), B [83, 86), B+ [86, 90),  
C- [70, 73), C [73, 76), C+ [76, 80),  
D- [60, 63), D [63, 66), D+ [66, 70)  
F [0, 60)

**Lecture video quizzes:**

Students will be required to watch lecture videos on Canvas before attending lectures in person on Tuesdays and Thursdays. Each set of lecture videos will have one corresponding lecture video quiz on Canvas, due at 11:59 pm the night before each corresponding class time (i.e. Mondays and Wednesdays).

These lecture videos will provide an introduction into the content that will be practiced during the scheduled class time. By utilizing a partially flipped classroom we can dedicate more class time to working through problems, which is essential for understanding statistics. The quizzes are meant to help motivate students to stay up to date with the rapid pacing of the summer class and as such will be composed of relatively straightforward questions based off of the corresponding videos' content. Two attempts are allowed per quiz and only the highest score will be used.

**Homeworks:**

Homework will be available on and submitted to Gradescope. A new homework will become available each Thursday and be due the following Tuesday at 11:59pm. Homework must be submitted as a single pdf.

You can do homework in any format you want (write on paper and then take pictures, type it, or use a tablet & pen) as long as it is compiled into a single pdf file. This can easily be done for non typed assignments via your phone using apps such as ScanGenius or iScanner or Tynscanner (many others exist).

**Discussion quizzes:**

Each discussion will be in person and run by the TA. The first 20 minutes will be used to discuss questions the students may have. The remaining 30 minutes will be used for a short written quiz on the previous week's material.

While the quiz will focus on the previous week's material, statistics is a cumulative topic so older material will still be relevant and necessary. No calculators will be necessary or allowed. These quizzes will be closed book, closed notes.

**Final exam:**

The comprehensive final exam will be in person in the lecture room September 6th from 1 to 3:50 pm PT. No outside materials are allowed aside from a pen or pencil. The final exam is comprehensive and should take approximately 1 hour to complete, but students will have the entire lecture time to complete the exam.

**“Life happened” pass:**

There are various unexpected reasons a student may be prevented from completing an assignment on time. No late work will be accepted. To account for this, each student will have one “life happened” pass to use for any single assignment (i.e. quiz or homework). The pass cannot be used on the final exam. If this pass is used on an assignment, the student will not receive 0 points, the final grade will be calculated ignoring that single assignment. Email the TA to use the “life happened” pass.

**Lecture:**

Attendance in lecture will not be enforced, but is strongly recommended. Statistics is a science that requires practice, not just memorization. Lecture video quizzes will be used to check if the students have watched the lecture videos before class, but are not an assessment of sufficient knowledge or understanding. In person lectures will be shorter than the allocated class time to account for the time dedicated outside of class to watch the lecture videos.

Class schedule:

Monday	Tuesday	Wednesday	Thursday	Fri
August 1.  Lecture video quiz due	2. (Lecture)	3. (Discussion) Discussion quiz 1 Lecture video quiz due	4. (Lecture) HW 1 released	5. Roy's Office Hour
8.  Catalina's Office Hour Lecture video quiz due	9. (Lecture) HW1 Due	10. (Discussion) Discussion quiz 2 Lecture video quiz due	11. (Lecture) HW 2 released	12. Roy's Office Hour
15.  Catalina's Office Hour Lecture video quiz due	16. (Lecture) HW 2 Due	17. (Discussion) Discussion quiz 3 Lecture video quiz due	18. (Lecture) HW 3 released	19. Roy's Office Hour
22.  Catalina's Office Hour Lecture video quiz due	23. (Lecture) HW 3 Due	24. (Discussion) Discussion quiz 4 Lecture video quiz due	25. (Lecture) HW 4 released	26. Roy's Office Hour
29.  Catalina's Office Hour Lecture video quiz due	30. (Lecture) HW 4 Due	31. (Discussion) Discussion quiz 5 Lecture video quiz due	September 1. (Lecture) Practice final released	2. Roy's Office Hour
5.  Catalina's Office Hour	6. Final exam			

Last update: July 24, 2022

## Further university policies and resources:

### In case of Emergency or Instructional Disruption

Visit these resources for more information on what to do to prepare for emergencies and/or what to do in case of emergency or instructional disruptions:

- Sign up for [Zot Alerts - Emergency Alert System](#)
- [Common Tech Troubles – Tips & Tricks](#)
- [Pedagogical Continuity](#)
- [Emergency Notes](#)

### Inclusive Excellence

[Student Services and Resources and Campus Ally and Awareness Resources](#) are provided by the [Office of Inclusive Excellence](#). UCI has taken a university-wide approach to equity, diversity and inclusion. This charge is about dismantling the systemic barriers of racism and discrimination that have too long been the norm in higher learning and our broader communities. The Office of Inclusive Excellence serves the campus priorities and is committed to a transformative, whole university effort grounded in our values: expect equity, support diversity, practice inclusion and honor free speech. (Ref from UCI Office of Inclusive Excellence)

- [Pandemic Resources for UCI students](#)
- [Diversity and Awareness at UCI](#)
- [Disability Services Center](#)
- [LGBT Resource Center](#)
- [Undocumented Student Support](#)
- [Counseling Center](#)
- [Campus Social Worker](#)
- [Transfer Student Center](#)

### Diversity Statement

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### Disability and Accessibility Accommodations

The University of California, Irvine, is committed to providing a barrier-free environment for learning and an electronic environment that is accessible to everyone, including individuals with disabilities. If you have a disability and feel you need accommodations in this program or a course, please contact the [Disability Services Center](#) (DSC). DSC approved accommodations will be provided for students who present a Faculty Notification Letter from the DSC.

## **Class Withdrawal Policy**

It is the student's responsibility to officially drop/withdraw from any courses before the deadline posted by the university's registrar's office. Please refer to [UCI's academic calendar](#) for the withdrawal policy, procedure, and refunded schedule.

## **Academic Integrity**

UCI is an institution of learning, research, and scholarship that is strengthened by the existence of an environment of integrity. As members of the academic community, students are responsible for maintaining this environment, and subscribe to the practice of academic integrity and accept individual responsibility for their work and actions. Violations of academic integrity are unacceptable and will not be tolerated, because they devalue the teaching and learning experience for the entire community. Observing basic honesty in one's work, words, ideas, and actions is a principle to which all members of the community are required to subscribe.

For more information, please visit [How to Recognize Plagiarism: Tutorials and Tests](#), I will recommend you to test it and get the certificate then send it to your Instructor or TA's.

## **Third-Party Tools**

Please click here for [information regarding the accessibility statements and the privacy statements](#).

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