M371 Syllabus
Statistics and Applications
Spring 2024

Lectures:	TR 4:35-6:20p Location: LS209
Instructor:	Cody Carroll
Email:	cjcarroll@usfca.edu
Office Hours:	M 11a-12p on Zoom and W 1:45p-2:45p in the Hive (Harney Engineering area)

Zoom link: `https://usfca.zoom.us/my/cody.carroll`

Text:

Probability and Statistics (Fourth Edition) by Degroot & Schervish

Material Covered

The topics we aim to cover will include:

- Point and Interval Estimation (MLEs, Method of Moments, Pivots)
- Bayesian Methods
- Sufficiency, Efficiency, and Fisher Information
- Modes of Convergence
- Convergence Theorems
- Likelihood Ratio Tests

Course Tenets

When in doubt, rely on the following:

- Put the work in.
- Ask questions before spiraling.
- When confused, work with a partner & zoom into details.
- When you understand, teach others & zoom out to debrief.
- Use common sense whenever possible.

Course Website

The class will be using Canvas & Github to distribute all resources.
Our Github website can be found at: `https://github.com/codycarroll/m371-s24/blob/main/README.md` .

Homework

- Students are encouraged to discuss and work together on assignments, but each student must turn in their own original work. ***If there is evidence that the work turned in is not original work, which includes copying another student's homework or using any solutions found online, all credit for that homework set will be forfeited. Homework is not to be posted to online help sites. These sites will be checked frequently.***
- **No late homework will be accepted.**

Exams

- There will be 3 exams, tentatively scheduled for 2/15, 3/26, and 5/2.
- No make-up or early exams will be given in order to ensure fairness and integrity of the class. Missing an exam without proper documentation of a personal illness or family emergency will result in a score of zero for that exam. Any documentation must be submitted to the instructor before the exam in question at the student's earliest convenience.

In Class Participation

Every 4 weeks you will receive an assessment of your engagement and participation in class. Participation is evaluated with the following rubric:

Engagement Level	Description (example behaviors)	Score (out of 5)
Fully engaged and present	Showing up to class consistently; Participating in class activities; offering questions and comments during lecture; regularly attending office hours; offering answers and alternate solutions (at the board/or socratically) in reponse to class discussions and other students' questions; Working with classmates outside of meeting times	5 (Excellent)
Keeping it together	Showing up to class with occasional absence; By and large participates in classroom activities; Decently vocal in discussions & sometimes asks/answers questions; occasionally attends office hours & works with other students	3-4 (Satisfactory)
Checked out	Sporadically or infrequently in class; Rarely volunteers thoughts, questions, solutions for the class; Hard to get ahold of; Never attends office hours; Does not engage with other students	0-2 (Needs to Improve)

Grading

Point Allocation**:

HW	20%
Exams	60%
In-Class Participation	20%

- Regrade Policy: You have **7 days** after a graded assignment is returned (quizzes, exams, homeworks) to contest a grade. After this time, the item may not be considered. If the 7 day period extends beyond the final exam date, the grade must be contested before the final exam.

Course Grade Cutoffs:***

A+	[97 - 100)
A	[93 - 97)
A-	[90-93)
B+	[87 - 90)
B	[83 - 87)
B-	[80-83)
C+	[77 - 80)
C	[73 - 77)
C-	[70 - 73)
D+	[67 - 70)
D	[63 - 67)
D-	[60 - 63)
F	[0 - 60)

** Grading scheme is approximate. Instructor reserves the right to adjust grading scheme.
*** Cutoffs are approximate. Instructor reserves the right to raise or lower any grade cutoffs. Final decisions will not be made until all assignments have been turned in and graded.