

STA3032 ENGINEER STATISTICS

Summer A 2022

Instructor:	Zikun Qin	Time:	M,T,W,R,F 9:30 AM - 10:45 AM
Email:	qinzikun@ufl.edu	Classroom:	MCCA G186
Office:	FLO 234	Office Hours:	M, R 3:00 PM - 4:00 PM

Course Page: [elearning](#)

Teaching Assistants:

Somnath Bhadra

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Course Description: A survey of the basic concepts in probability and statistics with engineering applications. Topics include probability, discrete and continuous random variables, confidence interval estimation, hypothesis testing, correlation, and regression.

Prerequisites: MAC 2311.

Textbook/Course Materials:

- Required textbook: Probability & Statistics for Engineers & Scientists (9th ed.) by Walpole, Myers, Myers, and Ye.
- Lecture notes by Dr. Juhjung Lee.

Course Objectives:

1. Access, manipulate, and analyze data using statistical software.
2. Produce appropriate graphs and descriptive statistics for one and two variables, for both categorical and continuous data.
3. Interpret graphs and descriptive statistics for one and two variables.
4. Know and apply the basic probability rules, the concepts of expected value and variance for discrete and continuous variables.
5. Know and apply the central limit theorem, which is crucial for inference.
6. Understand confidence intervals and hypothesis tests.
7. Carry out and interpret one-sample and two-sample analyses for means and proportions.
8. Carry out and interpret statistical modeling using simple linear regression.

Class Policy:

- Attendance is essential and highly expected.
- Check the course website frequently for latest course documents and important information including homework assignments and solutions, and other announcements.
- There will be tentatively 5-6 homework assignments. No late homework will be accepted.
- All exams will be in class and closed-book. However, you will be permitted to bring one 8.5 by 11 inch sheet of paper with formulas and notes on both sides for each exam.
- No make up exams will be offered except under unusual circumstances, for example documented cases of emergencies and extreme illnesses, and that too with prior permission from the instructor.

Important Dates:

Midterm #1	May 20, 2022
Midterm #2	June 3, 2022
Final Exam	June 17, 2022

Grading Policy: Homework (40%), Midterm 1 (20%), Midterm 2 (20%), Final (20%).

Course Grade Cut-offs:

B+ (3.33): 82 to < 86	A (4.00): ≥ 90	A- (3.67): 86 to < 90
C+ (2.33): 70 to < 74	B (3.00): 78 to < 82	B- (2.67): 74 to < 78
D+ (1.33): 59 to < 62	C (2.00): 66 to < 70	C- (1.67): 62 to < 66
E (0.00): < 53	D (1.00): 56 to < 59	D- (0.67): 53 to < 56

Academic Honesty: You may discuss homework with each other, but you must write up your solutions independently. You may never discuss exams with each other. You are held accountable to the [UF Student Honor and Conduct Code](#).

Students with Disabilities: Students requesting accommodation for disabilities must first register with the [Disability Resource Center \(DRC\)](#). The DRC will provide documentation to the students who must then provide this documentation to the instructor when requesting information. You must submit this documentation prior to submitting any assignments for which you are requesting accommodation.

Course Evaluation: Students are expected to provide feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluer.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.