

Math 1302 – Statistics (CRN 37279)

Syllabus (Spring 2025)

Instructor Information

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Office: S 233B

Office Hours: MW 3:15-4:45pm and TR 5-5:30pm

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Class Information

Book: *Statistics: Informed Decisions Using Data (with Integrated Review and MyStatLab)*, 6th edition
by Michael Sullivan, III

Meeting times: TR 2:55pm - 5:00pm, from 1/28/2025 to 5/22/2025

Room: S-225

Course Description

This course is designed for students majoring in business, social sciences, and life sciences. This course provides an overview of descriptive and inferential statistics. The students learn to read, interpret and present data in a well-organized way. This includes frequency distributions, graphs, measures of central tendency and variability, correlation and linear regression. While discussing inferential statistics, the students learn to make generalizations about populations. This includes probability, sampling techniques, confidence intervals, and hypothesis tests.

This course will cover the following sections from our book (not necessarily in this order):

Chapter 1: sections 1, 3, 4

Chapter 2: sections 1-2

Chapter 3: sections 1, 2, 5

Chapter 4: sections 1-2

Chapter 5: sections 1-6

Chapter 6: sections 1-2

Chapter 7: sections 1, 2, 4

Chapter 8: sections 1-2

Chapter 9: sections 1-4

Chapter 10: sections 1-6

Chapter 11: sections 1-5

Chapter 12: sections 1-2

Chapter 13: section 1

Chapter 14: section 2

Student Learning Outcomes

1. From paired data, students will calculate a linear regression line, use the regression line to make a prediction, calculate r and interpret
2. Graph linear equations in two variables
3. Incorporate properties of scientific notation in problem solving
4. Solve applied problems
5. Students critique and interpret data presented in appropriate graphical and/or verbal formats
6. Students will apply correct formulas to find probabilities of compound events involving ORs, ANDs, COMPLEMENTS, and/or AT LEAST ONES
7. Students will apply correct techniques to find probabilities involving random variables having a general, binomial, uniform, or normal dist.
8. Students will correctly construct confidence intervals involving a population proportion, population mean, and/or pop. standard deviation
9. Students will correctly perform 1- and 2-population hypothesis tests
10. Students will correctly perform Goodness-of-Fit, Test for Independence, Homogeneity of Proportions, and/or One-Way Analysis of Variance

Exams & Assignments

Lecture Worksheets/In Class Worksheets/Participation: Since this class is being taught using a “flipped classroom” model, you are going to watch each lecture before attending the next class. While watching the lecture, complete the lecture worksheet and turn it in at the start of the next class. This will be “proof” that you watched the lecture and good practice for the quiz on this material. You will get either 10 or 0 points on this worksheet depending on if it is clear that you did or didn’t watch the lecture.

While in class, we will work on another worksheet where we practice the ideas in the lecture and further prepare for the upcoming quiz on the material. This worksheet will be due at the end of class. Your grade on this worksheet will either be 10, 5, or 0 points. Getting a 10 means you completed the worksheet on time and participated in class. Getting a 5 means that you completed the worksheet but didn’t participate in class. Getting a 0 means you did not complete the worksheet.

Your grade for this portion of the course will be scaled and be worth 10% of your overall grade. No late worksheets will be accepted.

Online Homework: The homework for this class that counts towards your grade is to be done online using MyMathLab (<http://www.mymathlab.com>). Your total homework score at the end of the semester will be scaled and be worth 10% of your overall grade. Even though homework problems from the book will not be collected, you need to make sure that you are able to do all of them because similar problems will appear on quizzes and exams and this ensures that you have a firm grasp of the material.

Quizzes: You will have a quiz almost every class period. Your total quiz score at the end of the semester will be scaled and be worth 10% of your overall grade. Your lowest 2 quiz scores will be dropped. No make-up quizzes will be given.

Exams: There will be 4 exams (each worth 12% of your overall grade) and 1 final (worth 22% of your overall grade). The exams will be cumulative, but will mainly focus on the material covered after the point where the previous midterm left off. The final will be cumulative. All exams will be closed book. Each exam can cover anything assigned prior to the exam day (see the last page of the syllabus for the dates of your exams). No make-up exams will be given.

Extra Credit: Some of your quizzes and/or other assignments may be designated as extra credit and can only improve your grade. However, I do not guarantee that I will assign extra credit. Each point of extra credit will be worth 0.1% of your overall grade.

Grading Policy

Your grade in the class will be based off the following grading scale...

PERCENTAGE RANGE	GRADE
90%-100%	A
80%-89%	B
70%-79%	C
60%-69%	D
0%-59%	F

where your points come from...

Lecture Worksheets/In Class Worksheets/Participation	10%
Online Homework	10%
Quizzes	10%
Exams × 4 (12% each)	48%
Final (Comprehensive)	22%
Total	100%

Attendance and Make-Up Assignments

You are expected to attend every class and to know everything discussed for any days missed. If you miss **three or more** classes, you will be dropped from this course regardless of academic progress.

There will be no make up quizzes or exams. If you have to miss a class for any reason, make sure to stay caught up on all the material covered in class.

Important Dates

Last day to add course: 2/9/2025

Last day to drop course for a refund: 2/9/2025

Last day to drop course w/out receiving a "W": 2/21/2025

Last day to drop and receive a "W": 4/25/2025

Note: It is the student's responsibility to add, drop, or withdraw from the class by the dates above, otherwise the student will receive the grade that their work merits.

Behavior

Please respect me and your classmates and make the class more conducive to learning by not talking in class unless called on, even if you are discussing the problem that is on the board. If you must talk, either do it in a soft enough voice so as not to disturb your classmates, or leave the room and come back when you are done. Please turn off cell phone ringers before coming to class. As a rule of thumb, just try to avoid disrupting class.

Cheating Policy

Cheating constitutes academic dishonesty and the penalty can range from a 0 on that assignment to an F in the course. This decision will be at my discretion depending on the severity of the incident.

Cell Phones

The use of cell phones is prohibited during class. Please make sure you turn OFF your cell phones before coming to class (not just on silent).

Calculators

A TI-83 or TI-84 graphing calculator is required for this course. Please make sure to bring your calculator to class at all times as it will be used extensively in this class.

Day	Date	Schedule
T	1/28	Sections 1.1
R	1/30	Sections 3.1, 3.2, 3.5
T	2/4	Section 5.1
R	2/6	Meaning of Probability Sections 5.2-5.4: Compound Events
T	2/11	Sections 5.2-5.4 (continued): Probabilities of ORs, Conditional Probabilities, & Independent Events
R	2/13	Sections 5.2-5.4 (continued): Probabilities of ANDs, NOTs, and AT LEAST ONE
T	2/18	More Complicated Probability Problems (Rephrasing Problems) Sections 5.5, 5.6
R	2/20	Section 6.1
T	2/25	Review for Exam 1 (30 min) Exam 1 (80 min) Covers Chapter 1, 2, 3 and 5
R	2/27	Section 6.2
T	3/4	Section 7.1
R	3/6	Section 7.2
T	3/11	Section 7.4
R	3/13	Section 8.1, 8.2
T	3/18	Review for Exam 2 (30 min) Exam 2 (80 min) Covers Chapters 6 and 7
R	3/20	Section 9.1
T	3/25	No Class (Spring Break)
R	3/27	No Class (Spring Break)
T	4/1	Section 9.2
R	4/3	Sections 9.3, 9.4
T	4/8	Sections 10.1, 10.3
R	4/10	Review for Exam 3 (20 min) Exam 3 (90 min) Covers Chapters 8 and 9
T	4/15	Section 10.2
R	4/17	Sections 10.4, 10.5, 10.6
T	4/22	Section 11.1
R	4/24	Sections 11.2, 11.3
T	4/29	Sections 11.4, 11.5
R	5/1	Sections 12.1, 12.2
T	5/6	Review for Exam 4 (20 min) Exam 4 (90 min) Covers Chapters 10 and 11
R	5/8	Sections 12.2 (continued), 13.1
T	5/13	Sections 4.1, 4.2, 14.2
R	5/15	Review for Final Exam
R	5/22	Final Exam (1:55pm - 4:55pm) Covers Chapters 1-13

This syllabus is subject to change without notice. Any serious changes will be announced in class.