



DAVIS UNIVERSITY

COURSE SYLLABUS
MTH335: STATISTICAL METHODS
SUMMER QUARTER 2025

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COURSE SYLLABUS FOR: MTH335 STATISTICAL METHODS

CREDIT HOURS: 5 CREDITS

INSTRUCTOR:

INSTRUCTOR EMAIL:

INSTRUCTOR OFFICE HOURS:

COURSE DESCRIPTION: Topics include basic concepts of probability, normal and binomial distributions, hypothesis testing, confidence intervals, Correlation and Regression, and chi-square distribution.

PREREQUISITES: Elementary Calculus

TEXT: Elementary Statistics: Picturing the World, 7th edition, Pearson, by Ron Larson, Betsy Farber, ISBN-13: 9780137504329

LATE WORK POLICY: All students are expected to submit homework assignments electronically on the date specified on the syllabus. No late homework will be accepted and the student will receive a "0" (zero) for the homework assignment. Should the student refuse to complete the assigned work for the class, it could result in the student failing the class. All work assigned is expected to be completed on the date assigned. The instructor reserves the right to alter the schedule as necessary. Please be sure to check your email/Moodle for any changes to the schedule.

PLAGIARISM AND COPYRIGHT INFRINGEMENT POLICY: Work that is found to be plagiarized receives a grade of zero and often causes a student to fail a class. Documentation of plagiarism is added to the student's academic file as a violation of accepted student conduct and is subject to disciplinary action. Plagiarism is the use of another person's exact words, or their ideas written in the student's words without giving the original author credit.

Plagiarism can result from any of the following:

- Quote material directly without using quotation marks.
- Paraphrase the original so that many of the phrases are the same as the original. A good rule is no more than 3 or 4 words in a row should be the same as the original.
- Copy the original sentence pattern, substitution synonyms for key words.
- Neglect to indicate the source of the original material.

ASSESSMENTS:

Content

Assignments	20%
Quizzes	20%
Exams	50%
Participation	10%
Total	100%

COURSE GRADE: A = 93%-100%

B = 85%-92%

C = 77%-84%

D = 70%-76%

F = below 70%

TENTATIVE CLASS SCHEDULE:

(Subject to change)

Week	Content Covered	Assignments & Assessment Due
Week 1:	1.1 An Overview of Statistics 1.2 Data Classification 1.3 Data Collection and Experimental Design 2.1 Frequency Distributions and Their Graphs 2.2 More Graphs and Displays 2.3 Measures of Central Tendency 2.4 Measures of Variation 2.5 Measures of Position	Assignment 1 - Fri
Week 2:	3.1 Basic Concepts of Probability and Counting 3.2 Conditional Probability and the Multiplication Rule 3.3 The Addition Rule 3.4 Additional Topics in Probability and Counting 4.1 Probability Distributions 4.2 Binomial Distributions 5.1 Introduction to Normal Distributions and the Standard Normal Distribution 5.2 Normal Distributions: Finding Probabilities	Assignment 2 - Thur Exam 1- Friday
Week 3:	5.3 Normal Distributions: Finding Values 5.4 Sampling Distributions and the Central Limit Theorem 6.1 Confidence Intervals for the Mean (S Known) 6.2 Confidence Intervals for the Mean (S Unknown) 6.3 Confidence Intervals for Population Proportions 7.1 Introduction to Hypothesis Testing 7.2 Hypothesis Testing for the Mean (S Known)	Assignment 3 - Fri
Week 4:	7.3 Hypothesis Testing for the Mean (S Unknown) 7.4 Hypothesis Testing for Proportions 8.2 Testing the Difference Between Means (Independent Samples, S1 and S2 Unknown) 8.3 Testing the Difference Between Means (Dependent Samples) 8.4 Testing the Difference Between Proportions 9.1 Correlation 9.2 Linear Regression	Assignment 4 - Thur Exam 2- Fri

Week 5:	9.3 Measures of Regression and Prediction Intervals 9.4 Multiple Regression 10.1 Goodness-of-Fit Test 10.2 Independence 10.3 Comparing Two Variances 10.4 Analysis of Variance	Assignment 5 - Thur Final Exam- Fri
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