

STAT 3717 - Statistical Methods

Fall 2026 Syllabus, Section 01, CRN 40825,

Credit hours: 4

Instructor

Paul Nachim

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Public Instructor Information

Instructor Title: Lecturer

Instructor Professional Qualifications: M.S., Mathematics, 1990

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Course Description

3717. Statistical Methods. Probability and statistics designed for students majoring in the natural sciences. Topics include descriptive statistics, probability, estimation, testing hypotheses, analysis of variance, regression and nonparametric statistics. Use of personal computers with computer software will be required. Credit will not be given for both STAT 3717 and STAT 3743. Prereq.: "C" or better in one of MATH 1552, MATH 1570, MATH 1571, MATH 1571H, MATH 1581, MATH 1581H, MATH 1585H or equivalent. 4 s.h.

Course Readings

Group	Title	Author	ISBN
Optional	Introduction to Statistics and Data Analysis (6th edition)	Roxy Peck, Tom Short & Chris Olsen	

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Topics and Assignments

Week of	Reading(s)	Proposed Topic	Due/To Prepare for Class
8/24	1.1 – 1.4 2.1 – 2.5	The Role of Data Analysis Collecting Data Sensibly	
8/31	3.1 – 3.5	Graphical Methods for Describing Data	
9/7	4.1 – 4.5	Numerical Methods for Describing Data	
9/14	5.1 – 5.3	Summarizing Binary Data	
9/21	6.1 – 6.7	Probability	
9/28	7.1 -7.8	Random Variables and Distributions	
10/5	8.1 – 8.3 9.1 – 9.4	Sampling Variability and Distributions Estimation Using a Single Sample	
10/12	10.1 – 10.6	Hypothesis Testing Using a Single Sample	
10/19	11.1 – 11.4	Comparing Two Populations or Treatments	
10/26	12.1 – 12.3	The Analysis of Categorical Data and Goodness of Fit	
11/2	13.1 – 13.6	Simple Linear Regression and Correlation	
11/9	14.1 – 14.5	Multiple Regression Analysis	
11/16	15.1 -15.2	Analysis of Variance	

11/23	16.1 – 16.3	Nonparametric Statistical Methods
11/30		Catch up and Review

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.