

STAT 6940 - Advanced Data Analysis

Fall 2026 Syllabus, Section 02, CRN 44185,

Credit hours: 3

Instructor

Nguyet Nguyen

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Public Instructor Information

Instructor Title: Ph.D

Instructor Professional Qualifications: Ph.D Financial Mathematics 2014, Florida State University, MS Financial Mathematics 2011, Florida State University.

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Course Description

6940. Advanced Data Analysis. An overview of techniques in data analysis. Includes a strong emphasis on visual interpretation of data. Topics include one or more samples, proportions, odds, regression, and multiple comparisons. Prereq.: STAT 3743 or permission of graduate coordinator. 3 s.h.

Course Readings

Group	Title	Author	ISBN
Required	Introduction to Statistical Methods and Data Analysis (7th Edition).	Lyman R. Ott	978-1305269477

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	Chapter 1-3	Introduction, Collecting Data Summarizing Data	Quiz 1
8/31	Chapter 4	Probability Probability Distributions	Quiz 2 Assignment 1 due
9/14	Chapter 6 (6.1-6.6)	Inferences Comparing Two Population Central Values	Quiz 3
9/21	Chapter 8 (8.1-8.6)	Inferences about More Than Two Populations	Quiz 4 Assignment 2 due
9/28	Chapter 9 (9.1-9.9)	Multiple Comparisons	Quiz 5
10/5	Chapter 1-9 Chapter 10 (10.1-10.8)	Midterm Exam Categorical Data	Midterm Exam Assignment 3 due
10/12	Chapter 11 (11.1-11.7)	Linear Regression and Correlation	Quiz 6
10/19	Chapter 12 (12.1-12.8)	Multiple Regression and the General Linear Model	Quiz 7 Assignment 4 due
10/26	Chapter 12 (12.1-12.8)	Multiple Regression and the General Linear Model	Quiz 8
11/2	Chapter 13 (13.1-13.4)	Further Regression Topics/Logistic Regression	Quiz 9 Assignment 5 due
11/9	Chapter 13 (13.1-13.4)	Multinomial Logistic Regression	Quiz 10

11/16	Lecture Notes	Survival Analysis*	Quiz 11 Assignment 6 due
11/23	Chapter 14 (14.1-14.6)	Analysis of Variance for Completely Randomized Design*	Quiz 12
11/30	Chapter 15 (15.1-15.7) Term Paper	Analysis of Variance for Block Design* Term Paper	Quiz 13 Term Paper Presentations
12/7	Final Exam * Optional Topics that may be substituted with other advanced topics. Additional topics may be covered by the course instructor.	Final Exam	Final Exam and Term Paper due

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