STAT 4817 - Applied Statistics

Fall 2026 Syllabus, Section 01, CRN 42591,

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

4817. Applied Statistics. Application of regression, survey sampling, analysis of variance, design and analysis of experiments, and related topics. Prereq.: C or better in STAT 3717 or STAT 3743. 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

Day	Date	Reading(s)	Proposed Topic	Due/To Prepare for Class
Mon	8/24	Chapter 1-2	Introduction, Collecting Data	
Wed	8/26	Chapter 3	Summarizing Data	Warm up Quiz 1
Mon	8/31	Chapter 4	Probability	Quiz 1
Wed	9/2	Chapter 4	Probability Distributions	Warm up quiz 2 Assignment 1 due
Mon	9/7	No Class		
Wed	9/9	Chapter 5 (5.1-5.8)	Inferences about Population Central Values Bootstrap method	Quiz 2 Warm up quiz 3
Mon	9/14	Chapter 6 (6.1-6.6)	Inferences Comparing Two Population Central Values	Quiz 3
Wed	9/16	Chapter 6 (6.1-6.6)	Inferences Comparing Two Population Central Values	Warm up quiz 4 Assignment 2 due
Mon	9/21	Chapter 8 (8.1-8.6)	Inferences about More Than Two Populations	Quiz 4
Wed	9/23	Chapter 8 (8.1-8.6)	Inferences about More Than Two Populations	Warm up quiz 5
Mon	9/28	Chapter 9 (9.1-9.9)	Multiple Comparisons	Quiz 5
Wed	9/30	Chapter 9 (9.1-9.9)	Multiple Comparisons	Warm up quiz 6 Assignment 3 due

Mon	10/5	Chapter 1-9	Midterm Exam	Midterm Exam
Wed	10/7	Chapter 10 (10.1-10.8)	Categorical Data	Warm up quiz 7
Mon	10/12	Chapter 10 (10.1-10.8)	Categorical Data	Quiz 6
Wed	10/14	Chapter 11 (11.1-11.7)	Linear Regression and Correlation	Warm up quiz 8 Assignment 4 due
Mon	10/19	Chapter 11 (11.1-11.7)	Linear Regression and Correlation	Quiz 7
Wed	10/21	Chapter 12 (12.1-12.8)	Multiple Regression and the General Linear Model	Warm up quiz 9
Mon	10/26	Chapter 12 (12.1-12.8)	Multiple Regression and the General Linear Model	Quiz 8
Wed	10/28	Chapter 12 (12.1-12.2)	Multiple Regression and the General Linear Model	Warm up quiz 10 Assignment 5 due
Mon	11/2	Chapter 13 (13.1-13.4)	Further Regression Topics/Logistic Regression	Quiz 9
Wed	11/4	Chapter 13 (13.1-13.4)	Further Regression Topics/Logistic Regression	Warm up quiz 11
Mon	11/9	Chapter 13 (13.1-13.4)	Multinomial Logistic Regression	Quiz 10
Wed	11/11	Chapter 13 (13.1-13.4)	Multinomial Logistic Regression	Warm up quiz 12 Assignment 6 due
Mon	11/16	Lecture Notes	Survival Analysis*	Quiz 11
Wed	11/18	Lecture Notes	Survival Analysis*	Warm up quiz 13
Mon	11/23	Chapter 14 (14.1-14.6)	Analysis of Variance for Completely Randomized Design*	Quiz 12
Wed	11/25	Chapter 14 (14.1-14.6)	Analysis of Variance for Completely Randomized Design*	Warm up quiz 14 Assignment 7 due
Mon	11/30	Chapter 15 (15.1-15.7)	Analysis of Variance for Block Design*	Quiz 13
Wed	12/2	Term Paper	Term Paper	Term Paper Presentations
Mon	12/7	Final Exam	Final Exam	Final Exam and Term Paper due
Wed	12/9	* Optional Topics that may be substituted with other advanced topics. Additional topics may be covered by the course instructor.		

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.