

EDF 6402
Quantitative Foundations of Educational Research: Inferential Statistics
Spring 2016

Course Information

Name: EDF 6402- Section 4323
Time: Thursdays 1:55pm to 4:55pm
Room: NRN 219
Prerequisite: EDF 6400 or equivalent

Instructor Information

Professor: Dr. Anne Corinne Huggins-Manley, Assistant Professor
Contact: ahuggins@coe.ufl.edu; (352) 273-4342
Office: Norman 119A
Office Hours: Tuesdays & Thursdays 9:00am to 10:00am

Teaching Assistant Information

TA: Yuxi Qiu
Contact: yqiu2013@ufl.edu
Role: The TA is your first point of contact with respect to questions about course material. This includes all questions about content of the lectures, readings, assignments, and exams.

Objectives

The objective of this course is to cover a variety of introductory topics in applied statistics, with emphasis on analysis of variance (ANOVA) and regression techniques. The goal is to provide learning experiences that help you understand, apply, and interpret a variety of statistical methods commonly used in educational research. Through course readings, lectures, assignments, exams, and video tutorial assignments, students will build a conceptual schema for applied statistics.

Course Website, Statistical Software, and Video Tutorials

The course website is at <https://ufl.instructure.com>. It is a repository for all class activities, including the posting of class readings, class notes, handouts, assignments, etc... All course readings, notes, examples and handouts will be posted prior to class and students are responsible for printing these materials when desired. Assignments and other materials should be submitted through the website unless otherwise instructed.

SPSS software will be utilized for lecture notes and for completion of coursework. SPSS can be obtained for free from the "UF Apps" at: <http://info.apps.ufl.edu>. SPSS can also be rented from: http://e5.onthehub.com/WebStore/ProductSearchOfferingList.aspx?ws=49c547ba-f56d-dd11-bb6c-0030485a6b08&vsro=8&srch=base+gradpack&JSEnabled=1&utm_source=LandingPage-SPSS-Statistics-21&utm_medium=LandingPage&utm_campaign=SPSS.

Readings

Required: Lomax, R.G., & Hahs-Vaughn, D.L. (2012). *An introduction to statistical concepts* (3rd ed.). NY: Taylor & Francis Group.

Additional readings will be posted on the course website.

Course Requirements

Assignment 1:	15% of final grade
Assignment 2:	15% of final grade
Assignment 3:	15% of final grade
Assignment 4:	15% of final grade
Readings:	10% of final grade
Mid-term Exam:	15% of final grade
Final Exam:	15% of final grade

Description of Course Requirements

Assignments: There are four assignments during the semester. Each assignment will be posted on the course website at least one week prior to the due date, and each assignment will detail the grading schema and specific instructions. Each student is required to complete the assignments on her/his own and is required to turn in her/his own assignments.

Exams: A mid-term and a final exam will take place during the semester. The exams are non-cumulative with the mid-term covering the first half of the semester and the final exam covering the second half of the semester. Review guides will be posted on the course website prior to the exams.

Readings: At the beginning of every class, a randomly chosen set of students will be asked to summarize and critique the readings assigned for that day. Each student's grade will be calculated as the number of times the student demonstrated that she/he read and critiqued the readings divided by the total number of times that student was randomly chosen. **You are to check your syllabus for assigned readings every week, as there may be slight changes to the requirements as the semester continues. Also, repeatedly being absent when you are called upon will be scored as a 0 for reading on those days.**

Course Grades

Final grades will be assigned based on the scale below. Unless a computational error has been made, grades will not be changed after the end of the semester.

Overall course percent	Grade
93.0% - 100%	A
90.0% - 92.9%	A-
87.0% - 89.9%	B+
83.0% - 86.9%	B
80.0% - 82.9%	B-
77.0% - 79.9%	C+
73.0% - 76.9%	C
70.0% - 72.9%	C-
67.0% - 69.9%	D+
63.0% - 66.9%	D
60.0% - 62.9%	D-
59.9% or less	E

Class Attendance

Students are expected to be present for all classes, since much material will be covered only once in class. Students who have extraordinary circumstances preventing attendance, or who must leave early, should explain these circumstances to the course instructor prior to the scheduled class, or as soon as possible thereafter. Attendance will not be checked or graded, but you are responsible for the content of all classes, including issues raised in the spontaneous class discussions. If you must miss a class, please request notes from your classmates.

Missed Work and Extra Credit

Missed Work: It is expected that no students will miss any due dates for the course requirements. **Each day that a graded requirement for the class is late will result in a ten percentage point deduction.** For example, if a student earns a 100% on an assignment, it will receive a 90% if it is one day late, 80% if it is two days late, and so on. Unavoidable missed due dates may be excused by the instructor, provided **advanced notice and official documentation** that aligns with UF policies for excused absences. Excuse of a late grade requirement can only be achieved in private consultation with the instructor, and will require written supportive documentation (e.g., doctor's certificate). When in doubt, check with the instructor. Make-up final exams will only be granted in extreme cases, and the instructor must have approved the make-up exam prior to the exam date.

Extra credit: No planned opportunities for extra credit exist in this course.

Academic dishonesty

The University of Florida Student Honor Code and Conduct Code can be found at <http://www.dso.ufl.edu/sccr/honorcodes/conductcode.php>, and all students must abide by these codes. The honor code states:

We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity. On all work submitted for credit by students at the university, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

Written assignments will be checked for plagiarism against published works, other papers submitted by classmates at the current and previous semesters and internet pages using Turnitin, which is UF's plagiarism detection software. It is expected that submitted work will solely reflect the student's own efforts.

Accommodations for Students with Disabilities

If you require classroom accommodation because of a disability, you must first register with the Dean of Students Office (<http://oss.ufl.edu/>). The Dean of Students Office will provide documentation to you, which you then give to the instructor when requesting accommodation. The College is committed to providing reasonable accommodations to assist students in their coursework.

Counseling and Student Health

Students may occasionally have personal issues that arise in the course of pursuing higher education or that may interfere with their academic performance. If you find yourself facing problems affecting your coursework, you are encouraged to talk with an instructor and to seek confidential assistance at the University of Florida Counseling Center, 352-392-1575, or Student Mental Health Services, 352-392-1171. Visit their web sites for more information: <http://www.counsel.ufl.edu> or <http://www.health.ufl.edu/shcc/smhs/index.htm#urgent>.

The Student Health Care Center at Shands is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at Shands offers a variety of clinical services, including primary care, women's health care, immunizations, mental health care, and pharmacy services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at: www.health.ufl.edu/shcc

Crisis intervention is always available 24/7 from Alachua County Crisis Center: (352) 264-6789.

Tentative Schedule

Date	Topic	Readings	Due
1/7	Introduction to Class and Review of Statistics	L & H Chapters 6 & 7	
1/14	One-Factor ANOVA-Fixed Effects Model	L & H Chapter 11	
1/21	Multiple Comparison Procedures	L & H Chapter 12	
1/28	Factorial ANOVA-Fixed Effects Model	L & H Chapter 13	
2/4	Factorial ANOVA-Fixed Effects Model	L & H Chapter 13	Assignment 1 Due
2/11	ANCOVA-Fixed Effects Model	L & H Chapter 14	
2/18	Repeated Measures and Mixed ANOVA	L & H Chapter 15 (pp. 493-508)	
2/25	Other ANOVA Models and Midterm Review	L & H Chapter 15 (pp. 477-493; 509-556)	Assignment 2 Due
3/10	Midterm Exam	None	Midterm Exam
3/17	Inferences about Proportions	L & H Chapter 8	
3/24	Bivariate Measures of Association	L & H Chapter 10	
3/31	Simple Linear Regression	L & H Chapter 17	Assignment 3
4/7	Multiple Linear Regression	L & H Chapter 18	
4/14	Advanced Regression Applications and Final Review	L & H Chapters 18 & 19	Assignment 4 Due
TBA	Final Exam	None	Final Exam