EDF 6400
Quantitative Foundations of Educational Research: Overview
Fall 2015

Course Information

Name:	EDF 6403- Section 4220
Time:	Thursdays 9:35am to 12:35pm
Room:	NRN 292
Prerequisite:	STA 2023, STA 2122 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 9:00am to 12:00pm or by appointment

Objectives

The objective of this course is to introduce foundational material in educational research design and statistics. The goal is to provide learning experiences that help the student understand, apply, and interpret a variety of research designs and statistical methods commonly used in educational research. The student will learn how to choose a research problem, design a study to address the problem, perform basic analysis, and communicate the research in writing. Analyses learned will include descriptive statistics, univariate statistics, and t-tests.

Course Website and Statistical Software

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" Pilot Program for UF students at: http://news.it.ufl.edu/education/uf-apps-pilot-program-launched/. 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.

Description of Course Requirements

Assignments: There are five 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.

Exams: This course contains a take home cumulative final exam. The exam will be distributed toward the end of the semester and further instructions will be provided at that time.

Readings: At the beginning of each class, students will be randomly chosen to summarize the readings. A grade will be assigned to each student for demonstrating that she/he read the assigned readings.

Course Grades

Assignments	Each worth 15% of total course grade
Exams	Worth 20% of total course grade
Readings	Worth 5% of total course grade

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
Aug. 27	Introduction to Research	Kline Ch. 2 Super WHY Research	
Sept. 3	Choosing a Research Problem	Ary Ch. 3	
Sept. 10	Observational Research, Experimental Research and Random Assignment	IES RCT Reference	
Sept. 17	Validity	Shadish, Cook & Campbell Chs. 2 & 3	Assignment 1 Due
Sept. 24	Research Designs	Kline Ch. 4; Anestis et al 2014	
Oct. 1	Measurement	Thompson Ch. 1; Messick 1989	
Oct. 8	Introduction to Statistics	L & H Ch. 1	Assignment 2 Due
Oct. 15	Data Representation and Univariate Parameters and Statistics	L & H Ch. 2 & 3	
Oct. 22	Normal Distribution and Standard Scores	L & H Ch. 4	Assignment 3 Due
Oct. 29	Introduction to Probability and Sample Statistics	L & H Ch. 5	
Nov. 5	Introduction to Hypothesis Testing	L & H Ch. 6	
Nov. 12	Inferences about a Single Mean	L & H Ch. 6	Assignment 4 Due
Nov. 19	Inferences about the Differences between Two Means	L & H Ch. 7	
Dec. 3	Review for Final Exam	None	Assignment 5 Due
Dec. 14	No Class	None	Final Exam Due