



*Department of Educational Leadership and Policy Studies
Educational Administration, Curriculum and Supervision*

**EACS 6023 Applied Quantitative Research Methods in Ed Admin
Fall 2020
Online August 24-December 11**

Instructor Information:

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Program Area Mission:

The mission of the Educational Administration, Curriculum and Supervision (EACS) Program Area is to promote critical inquiry that addresses important issues relating to teaching, learning, and leadership in order that service and collaboration among colleagues and the professional communities may be enhanced.

Course Overview:

The course is designed to introduce basic concepts and techniques related to quantitative data analysis, including statistics. Successful completion of the course would help provide students with the analytical tools necessary to become effective, critical consumers of educational research.

Course Objectives:

- At the conclusion of the course, the student will be able to:
1. Understand fundamental concepts of quantitative research design;
 2. Analyze inferential, quantitative research studies; and,
 3. Develop competency as a critical consumer of quantitative educational research.

Special Needs Students:

Any student requiring special accommodation in the class due to disability is advised to inform the instructor of his/her special needs. Every effort will be made to ensure that

the proper accommodations are made to enhance the learning environment for every student. Please refer to the OU Disability Resource Center (<http://www.ou.edu/drc>) as needed.

Course Text and Software (all required):

- Ravid, R. (2014). *Practical Statistics for Educators* (5th ed.). Lanham, MD: Rowman & Littlefield.
- SPSS statistical analysis software. Students are able to download free through OU at <https://customapps.ou.edu/studio/itstore/Download/Details/267> (64 Bit).
- Microsoft Excel.

Course Format:

The course is fully online during the fall semester 2020. Eleven weeks include content topics presented fully Online. The remaining five of the weeks are devoted to analyzing data through SPSS that will be used for the statistical analysis projects, also demonstrated fully Online. All of the content is available through the 'Modules' link on the menu to the left of the course Canvas page. If you have substantive (content) questions, please email the professor at maiden@ou.edu. For technical questions about Canvas, please contact the OU IT Help desk at 405.325.4636 or <https://support.ou.edu>.

Course Requirements:

Each student should carefully review the course video presentations and course resources. Also, completion of the optional Activities for each topic is recommended but not required.

Each student shall complete a series of five statistical analysis projects, based on a class database provided in the course Canvas area. The data analysis required to complete these projects will be demonstrated via video through Modules. These activities are the only requirements for class credit.

Submission of Assignments:

The five statistical analyses should be submitted to the relevant Canvas Assignments page. The instructor will provide feedback for each submission. All assignments should be submitted no later than the due date. Any late submissions must be approved by the instructor in advance (excepting emergencies). Unapproved late assignments will include a score deduction of 10% for each business day past the due date. Early submissions are welcome.

Academic Honesty:

Please carefully review the University's Office of Academic Integrity website at <http://integrity.ou.edu/>, particularly the Student's Guide to Academic Integrity. All

submitted assignments should be the student's original work. All projects submitted to the Assignments area will be reviewed by Turnitin software, a service that provides textual similarity review for the detection of plagiarism.

Course Schedule

The course reading schedule is available through Modules in the Canvas site. Eleven weeks of the course include a quantitative research methods topic. Each topic consists of a readings and supplemental resources for your review. Also, each topic includes a video presentation available through YouTube – the playlist links are included in the Canvas Modules area. The topic is supplemented by optional activities focusing on basic statistical procedures.

The remaining five weeks include data analysis necessary to complete the Statistical Analysis Projects. Following is the course schedule:

Week of:

August 24	Topic: Introduction to Research Design
August 31	Topic: Descriptive Statistics
September 7	Topic: Correlation
September 14	Correlation Project data analysis demonstration
September 21	Topic: Measurement
September 28	Topic: Data Distributions
October 5	Topic: Inferential Statistics
October 12	Topic: t-tests
October 19	t-tests Project data analysis demonstration
October 26	Topic: Analyses of Variance
November 2	Analysis of Variance Project data analysis demonstration
November 9	Topic: Simple Regression Analysis
November 16	Topic: Multiple Regression Analysis
November 23	Regression Project data analysis demonstration
November 30	Topic: Nonparametric Analyses
December 7	Nonparametric Project data analysis demonstration

Following are due dates for the five Statistical Analysis Projects (these are described in the Modules area):

September 21	Correlation Project due
October 19	t-test project due
November 9	Analysis of Variance (ANOVA) project due
November 30	Regression project due
December 11	Nonparametric project due

Grading:

The grade is based on the sum of the five statistical analysis projects for a maximum possible 100 points (20 points per project). Following is the grading scale:

A: 90 – 100

B: 80 – 89

C: 70 – 79

D: 60 – 69