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EDLD 625.50: Quantitative Research

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The University of Montana
Department of Educational Leadership

**EDLD 625: QUANTITATIVE RESEARCH
SPRING 2021**

CLASS:

Wednesdays 4:30-6:50 PM ZOOM

INSTRUCTOR:

John Matt, Ed.D.

Office: PJW 205

Office Hours: By Appointment

Phone 243-5610

e-mail: john.matt@mso.umt.edu

TEXTBOOK:

Privitera, G. J. (2020). *Research methods for the behavioral sciences* (3rd ed.). Los Angeles: Sage.

COURSE DESCRIPTION:

Quantitative Research is a core research course for doctorate studies in the Department of Educational Leadership. This course will provide students with the principles and techniques of quantitative research as they pertain to a doctoral dissertation proposal. Ethical considerations for conducting and reporting research will also be explored. Through this course, students will experience quantitative proposals utilizing survey, correlational, and causal-comparative designs as they become connoisseurs and critics of research designs and conclusions.

COURSE OBJECTIVES:

As a result of the successful completion of Quantitative Research, students will be able to:

<u>Standards Alignment</u>	<u>ISLLC</u>
1. Describe the major differences between quantitative and qualitative research designs;	1(K.4, D.6)
2. Demonstrate an understanding of the characteristics of quantitative research including survey, correlational, and causal-comparative designs;	1(K.4, D.6)
3. Apply the appropriate quantitative methods to a research study;	1(K.4, D.6)
4. Understand the concerns associated with interpreting research data;	1(K.4, D.6)
5. Understand the ethical considerations when conducting research;	5(K.2, D.4, P.2, P.9)
6. Utilize electronic databases to support a quantitative research proposal;	1(K.4, D.6)
7. Complete a class assigned quantitative research proposal; and	1(K.4, D.6)
8. Correctly use APA style in a research proposal.	

EXPECTATIONS:

Students enrolled in this course are expected to demonstrate regular and consistent class attendance and participate in all activities and discussions in a manner that promotes a scholarly environment where diverse ideas are tolerated and discussion is supported by informed opinion. (Refer to *Professional Standards for Student Performance* in Appendix A.) Written assignments

will reflect the individual's original work and, when appropriate, follow the American Psychological Association (APA) style. All references to works by other authors must be properly cited. All written assignments must include a title page (Refer to the attached example in Appendix B and be stapled in the top left corner; Running Heads are not necessary).

All students must practice academic honesty. Academic misconduct is subject to academic penalty by the course instructor and/or disciplinary sanction by the University. You are required to be familiar with the Student Conduct Code. The Student Conduct Code is available for review online at <http://www.umd.edu/SA/VPSA/index.cfm/page/1321>

In addition, students are required to be current in the assigned reading for the course and to submit and/or present required assignments in a timely manner. Late assignments will be accepted only by prior consent of the instructor.

ACCOMMODATIONS:

I want to be sensitive to any special needs that you may have. If you require some special accommodation or you are uncomfortable with some aspect of this course, I invite you to discuss these matters with me.

EMERGENCY TRAINING AND PROCEDURES:

Please notify me if you have emergency training or if you have any medical conditions that may impact you in this class.

ASSIGNMENTS:

In addition to the assigned readings, expectations of class participation and adherence to the *Professional Standards for Student Performance*, each student will be required to complete weekly assignments in preparation for each class.

GRADING:

Grades will be determined by the following weighted formula.
(100-90%=A: 89-80%=B: 79-70%=C: 69-60%=D: <60%=F)

Class Participation	15%
Short Assignments	15%
Chapter Two Review of the Literature (min 6 citations)	20%
Quantitative Research Proposal	30%
Quantitative Research Proposal Presentation	20%

Tentative Class Topics and Assignments:

<u>Date</u>	<u>Topic</u>	<u>Textbook Reading</u>
January 14	Introductions and Course Overview Outline of Quantitative Research Proposal	SHORT CLASS 4:30 – 5:30
January 21	Scientific Approach Experimental vs Non-experimental Research Causal Comparative Research Proposal Discussion <ol style="list-style-type: none"> a. Dissertation Writing the Dissertation <ol style="list-style-type: none"> a. APA 	Chapter 1
January 28	Hypotheses and Predictions Types of Non-experimental Research Proposal Chapter One Components Levels of Data	Chapter 2
February 4	Stats Flow Chart Problem Statement Program Evaluation Ethical Considerations Chapter Two: Reviewing the Literature <ol style="list-style-type: none"> a. Organization, Evaluation, and Synthesis <i>Scholars Before Researchers: On the Centrality of the Dissertation Literature Review in Research Preparation</i> by Boote and Beile (2005) 	Chapter 3 Boote & Beile
February 11	Finish Chapter 1 Components <ul style="list-style-type: none"> Definition of Terms Limitations & Delimitations Significance of the Study Chapter 2 Assignment Begin Chapter 3 Components	
February 18	Chapter Three Contents Studying Behavior <ol style="list-style-type: none"> a. Variables, Causality, and Validity Measurement Considerations <ol style="list-style-type: none"> a. Reliability, Validity, and Scales of Measurement Population Sampling Surveys	

February	25	Observing Behavior <ul style="list-style-type: none"> a. Quantitative and Qualitative Research Paradigms Survey Research Presenting Chapter 2 (strategies) Evaluating Research Testing Errors
March	4	No Class
March	11	Experimental Designs Conducting Experiments Chapter 2 Literature Review is Due
March	18	Complex Experimental Designs Single Case, Quasi-Experimental, and Evaluating Research Part 2
March	25	Experimental Designs Continued Developmental Research Chapter Four Contents Research Results
April	1	
April	8	Evaluation of Research Part 3 Generalizability
April	15	Statistical Inference Chapter 3 Discussion Descriptive Statistics Fun with Research
April	22	Catch-up Final Presentation Preparation Quantitative Research Proposal Due
April	29	Quantitative Proposal Presentations

APPENDIX A**PROFESSIONAL STANDARDS FOR STUDENT PERFORMANCE**

Graduate students in the Department of Educational Leadership at
The University of Montana are expected to:

- Demonstrate professional vision in the practice of educational administration
- Accept responsibility and accountability for class assignments in their role as members of the class
- Demonstrate growth during the period of their graduate career
- Demonstrate good decision making and an awareness of organizational issues from a variety of perspectives
- Demonstrate imagination and originality in the discussion of educational leadership issues
- Understand the relationship between theory and practice and the value of reflective leadership
- Demonstrate a moral, humanistic, ethical and caring attitude toward others
- Demonstrate an ability to build trust and positive relationships with others
- Demonstrate a tolerance for diversity and a warm acceptance of others regardless of their backgrounds or opinions
- Demonstrate emotional stability and an ability to work well with other members of the class, including the instructor
- Demonstrate an ability to express himself/herself well in speech and writing, and
- Demonstrate mastery of fundamental knowledge of course content and an understanding of its application

**FAILURE TO DEMONSTRATE THE AFOREMENTIONED QUALITIES ON A CONSISTENT BASIS MAY
RESULT IN REMOVAL FROM CLASSES AND/OR THE EDUCATIONAL LEADERSHIP PROGRAM.**

APPENDIX B

Assignment

Title of the Paper

by
Your Name

Submitted to
John J. Matt, Ed.D.

In Partial Fulfillment of the Requirements of
EDLD 625: Quantitative Research
The University of Montana
Spring 2011

APPENDIX G
Class Quantitative Research Proposal
Assessment Rubric

Category	5-4 Points	3-1 Points	0 Points	Total Points
Table of Contents	Organized, notes page numbers, and demonstrates correct levels of headings	Is not organized, and/or does not note page numbers, and/or does not demonstrate correct levels of headings	Not addressed	
Chapter One	Majority of chapter components thoroughly addressed and supported	Chapter components not thoroughly addressed and supported (such as lacking appropriate supporting citations)	Not addressed	
Chapter Two	Chapter design articulated in a manner that demonstrates an understanding of Boote & Beile (2005) criteria	Chapter design is poorly articulated and/or does not address the Boote & Beile (2005) criteria	Not addressed	
Chapter Three	Majority of chapter components thoroughly addressed and supported	Chapter components not thoroughly addressed (such as lacking appropriate supporting citations)	Not addressed	
APA Style	APA style followed to a degree that does not detract from the proposal	Lack of following APA style detracts from the proposal and/or causes confusion to the reader	Not Evident	
Writing Clarity	Writing is of a scholarly nature, clear, and mechanics and punctuation do not detract from the proposal	Writing is not of a scholarly nature, and/or is not clear, and/or mechanics and punctuation problems detract from the proposal	Not submitted	

APPENDIX H
Quantitative Research Proposal Presentation
Assessment Rubric

Category	2 Points	1 Point	0 Points	Total Points
Time Management	Presentation is within the 15-20 minute allotted time	Presentation is either too short or runs too long	Not evident	
Organization	Presentation is well organized in all areas and does not seem rushed	Presentation somewhat organized with minor problems in some areas and/or appears to be rushed	Not evident	
Oral Presentation	Correct grammar is used and the student's affect demonstrates an understanding of the content and design of the proposal	Grammar and/or the student's affect detract from the presentation, and/or the student does not demonstrate an understanding of the content and design of the proposal	Not evident	
PPT Slides	Slides are designed in a manner that enhances the presentation	Slides are designed in a manner that detracts from the presentation	PPT not used	
Questions	Questions are addressed in an adequate manner without becoming defensive	Questions are not thoroughly answered and/or answered with some misinformation	Questions answered in a manner that does not demonstrate an understanding of the concept.	