

**GEORGE MASON UNIVERSITY
COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT
GRADUATE SCHOOL OF EDUCATION**

EDRS 590 Section 001: Educational Research
3 Credits, Spring 2015
Thursdays, 7:20 PM to 10:00 PM Innovation Hall 328

PROFESSOR:

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COURSE DESCRIPTION

A. Prerequisites/Corequisites

Admission to GMU.

B. University Catalog Course Description

Develops skills, insights, and understanding to perform research, with emphasis on interpreting and applying research results. Critiques research, and uses findings in educational settings.

C. Expanded Course Description

This introductory research course examines connections among theoretical frameworks, research questions, and methods of data collection, analysis and reporting. The purpose of this course is to introduce learners to the basics of research design, including identifying a problem, conducting a brief literature search, describing data collection and analysis, writing and ethics. A general intent for the course is to help learners to become better consumers of research and to understand the ways education research relates to instructional practice and school improvement.

LEARNER OUTCOMES or OBJECTIVES

This course is designed to enable students to:

- Gain critical perspectives in order to understand the validity of education research.
- Use appropriate reference sources to locate publications relevant to a topic of their choice.
- Understand measures of central tendency and dispersion and their application to important education outcomes.
- Develop an informed perspective on issues in education that is grounded in contemporary research.
- Understand how teachers or administrators can use research to enhance instruction and inform practice.

- Use various social science perspectives as the foundation for understanding research and conducting research.
- Apply technology to the task of conducting and presenting education research.

PROFESSIONAL STANDARDS

In this course, the educational psychology standards will be addressed. Especially:

Standard 3: Knowledge of Educational Research and Assessment. Candidates will demonstrate an understanding of the basic concepts, principles, techniques, approaches, and ethical issues involved in educational research.

Standard 4: Analysis, Critique, and Evaluation of Educational Research. Candidates will use their knowledge of quantitative and qualitative research methodology to critically read and evaluate quantitative and qualitative research articles.

Standard 5: Candidates will use their knowledge of quantitative and qualitative research methodology to develop a research proposal.

Standard 6: Communication and Dissemination of Educational Research. Candidates will demonstrate critical thinking, oral presentation, technological, and writing skills as they are used in the profession. These include:

- a. knowledge and use of APA style,
- b. presentations,
- c. article abstracts,
- d. research proposals,
- e. literature reviews, and
- f. technological skills.

NATURE OF COURSE DELIVERY

This course will be taught face-to-face for all class sessions. Sessions will consist of some combination of whole- and small-group discussion and activities and instructor and student presentations. Students are expected to be prepared for class activities and discussions by reading assigned materials and completing assignments by their due dates.

REQUIRED TEXT

Creswell, J. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: SAGE Publications, Inc.

Additional short readings will be placed on Blackboard and distributed in class.

RECOMMENDED TEXT

American Psychological Association. (2010). *Publication Manual of the American Psychological Association* (6th ed.). Washington, DC: Author.

COURSE ASSIGNMENTS AND EXAMINATIONS

1. Critiques of Literature (3): (9% of grade; 3% for each critique/review)
 - a. Students will critique one qualitative research article and one quantitative research article (DUE: February 12) using the rubric/analysis tool at the end of the syllabus. Students will submit the articles via Blackboard and bring a paper copy of the rubric to class.
 - b. Students will complete a focused review (DUE: February 19) of the literature review of one of the articles selected above using the literature review tool at the end of the syllabus. Students will submit the articles via Blackboard and bring a paper copy of the rubric to class.

2. Proposal for Research Study (50% of grade)

The Proposal for Research Study will provide students the opportunity to develop practical skills for research as well as lay a foundation for an area of potential study later. The proposal will be developmental in nature, with each part of the proposal process being turned in for feedback and revision prior to the next. Grade will be assigned after feedback and revision, and rubrics for each part will be distributed in class for discussion before assignment is made. Note that these are not written papers: Part 1 is informal, Part 2 is an annotated bibliography, and Part 3 will generally be written as an outline/table/graphic.

- i. Part 1: Researching potential scholarly questions and supporting the creation of at least two research questions for your proposal. (20% of assignment; DUE: February 26 via Blackboard)
- ii. Part 2: Review of the literature to support your theoretical framework and topic (as an annotated bibliography). (40% of assignment; DUE: March 19 via Blackboard)
- iii. Part 3: Methods proposal for your research questions as a research design with data collection and analyses methods described. (40% of assignment; DUE: April 2 via Blackboard)

3. Proposal Presentation (25% of grade; 20% for presentation and 5% for abstract)

The Proposal Presentation will be your chance to synthesize the three parts in (2) above as a complete proposal. You will present your proposal as if you were requesting funding from your classmates to pursue the line of research. Your classmates will complete a review rubric for you, which you will receive at the conclusion of your presentation. (DUE: Presentation dates April 16, April 23 and April 30; assignment rubric to be distributed in class March 26; ALL presentations are due on April 16 before class; abstracts are due by Monday, April 13)

4. In-class participation, discussions, and in-class activities (16% of grade)

Students are expected to attend class sessions and participate in small and large group discussions and activities. An essential component of research is communicating with peers, leading discussions, and being prepared to share with colleagues. Thus, modeling this in our setting reinforces the importance of its place in the academic settings in which we all operate. This grade component will include the feedback and participation in the presentation sessions of your classmates.

GRADING

<i>Assignment</i>	<i>Points</i>
Article critiques (3 pts each)	9
Research proposal	
Questions and support	10
Literature research	20
Methods	20
Presentation and abstract	
Presentation	20
Abstract	5
Participation and in-class activities	16

A+ = 98 – 100

B+ = 87 – 89

C = 70 – 79

F = below 70

A = 93 – 97

B = 83 – 86

A- = 90 – 92

B- = 80 – 82

GMU POLICIES AND RESOURCES FOR STUDENTS

- a. Students must adhere to the guidelines of the George Mason University Honor Code (see <http://oai.gmu.edu/the-mason-honor-code/>)
- b. Students must follow the University policy for Responsible Use of Computing (see <http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/>)
- c. Student are responsible for the content of University communications sent to their George Mason University email account and are required to activate their account and check it regularly. All communications from the University, College, School and program will be sent to students solely through their Mason email account.
- d. The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling workshops, and outreach programs) to enhance students' personal experience and academic performance (see <http://caps.gmu.edu/>).
- e. Students with disabilities who seek accommodations in a course must be registered with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester (see <http://ods.gmu.edu>).
- f. Students must follow the University policy stating that all sound-emitting devices shall be turned off during class unless otherwise authorized by the instructor.
- g. The George Mason University Writing Center staff provides a variety of resources and services (e.g, tutoring workshops, writing guides, and handbooks) intended to support students as they work to construct and share knowledge through writing (see <http://writingcenter.gmu.edu/>).

PROFESSIONAL DISPOSITIONS

Students are expected to exhibit professional behaviors and dispositions at all times.

CORE VALUES COMMITMENT

The College of Education & Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles (see <http://cehd.gmu.edu/values/>).

For additional information on the College of Education & Human Development Graduate School of Education, please visit our website <http://gse.gmu.edu/>.

Tentative Course Organization & Schedule			
Date	Topics	Assigned Reading	Homework Class Activities Due Dates
January 22	<ul style="list-style-type: none"> • Introductions • Class expectations • Consuming research 		
January 29	<ul style="list-style-type: none"> • Research questions • Purpose Statements • GMU Library search mini-workshop 	Creswell Chapters 6 and 7	<u>Activity</u> : Comparison of research questions in different types of educational research
February 5	<ul style="list-style-type: none"> • Quantitative methods • Qualitative methods 	Creswell Chapters 8 and 9	Bring in one qualitative and one quantitative article from a peer-reviewed journal in an area of interest to you
February 12	<ul style="list-style-type: none"> • Literature Reviews 	Creswell Chapter 2	HW DUE: Qualitative and quantitative article critiques <u>Activity</u> : Comparison of literature reviews in research articles
February 19	<ul style="list-style-type: none"> • Using research theory 	Creswell Chapter 3	HW DUE: Literature review critique
February 26	<ul style="list-style-type: none"> • Ethical concerns • Writing a proposal • Writing an abstract 	Creswell Chapter 4 (pp. 77-83, 92-101)	HW DUE: Research Question assignment <u>Activity</u> : Comparison of abstracts in research articles
March 5	<ul style="list-style-type: none"> • Methods of collecting data 		

March 19	<ul style="list-style-type: none"> • Methods of analyzing data 		HW DUE: Review of the Literature assignment <u>Activity:</u> Comparison of presentations of data
March 26	<ul style="list-style-type: none"> • Class discussions to share methods ideas • Class discussion of rubric for presentations 		Bring research questions & be prepared to talk about ideas/thoughts/concerns about your methods
April 2	<i>No class meeting – Use time to continue working on presentation</i>		HW DUE: Methods assignment
April 9	<ul style="list-style-type: none"> • Mixed methods studies 	Creswell Chapter 10	HW DUE: Abstracts for presentations due by Monday, April 13
April 16	<ul style="list-style-type: none"> • Class presentations 		HW DUE: All student presentations due by class meeting time
April 23	<ul style="list-style-type: none"> • Class presentations 		
April 30	<ul style="list-style-type: none"> • Class presentations 		
May 7			Make-up assignment due for students missing any presentation sessions

EDRS 590
Assignment Rubric: Article Critiques

Name _____

Article Title			Journal		
Criteria	NO EVIDENCE (0)	BEGINNING Limited Evidence (1)	DEVELOPING Clear Evidence (2)	ACCOMPLISHED Clear, Convincing and Substantial Evidence (3)	COMMENTS
Purpose of the Study					
Research Questions					
Literature Review: Clear Connection to Questions					

Literature Review: Clear Framework					
Description of Research Design					
Sampling Methods					
Data Collection					
How were the validity and reliability of the data assessed?					

What descriptive or inferential statistics were used?

What conclusions did the researchers report?

Were the conclusions convincing? Why or why not?

What are the implications of this research for you or your research?

EDRS 590
Assignment Rubric: Literature Review

Name _____

Article Title			Journal		
Criteria	NO EVIDENCE (0)	BEGINNING Limited Evidence (1)	DEVELOPING Clear Evidence (2)	ACCOMPLISHED Clear, Convincing and Substantial Evidence (3)	COMMENTS
Clear Identification of the Topic					
Clear Explanation of the Rationale					
Cohesiveness of the Argument					

Presence/Utility of Summary at the Beginning?					
Helpful Use of Subheadings					
Extent of Interpretation & Critique of Literature vs. Listing Literature					
Clear Framework Around Which Article is Written?					

Overall Strengths of the Literature Review

Overall Weaknesses of the Literature Review

How will this review help you think about your literature review?

EDRS 590
Assignment Rubric: Participation & Classroom Activities

	Exceeds expectations (2)	Meets expectations (1.5)	Approaches expectations (1)	Falls below expectations (0)
Attendance 2 points	Exemplary attendance and tardies	Near perfect attendance, few tardies	Occasional (2-3) absences and/or tardies	Frequent absences and/or tardies
	Exceeds expectations (4)	Meets expectations (3)	Approaches expectations (1-2)	Falls below expectations (0)
Small-Group Class Activities 4 points	Exhibits leadership in small-group discussions. Exemplary preparation for activities.	Exhibits leadership in small-group discussions. Mostly prepared for activities.	Tends to listen and takes a passive role in small-group activities. Often unprepared for activities or attempts to catch-up during activity.	Does not participate in small-group activities or participates in a cursory way. Rarely prepared for activities.
Whole-Class Class Activities 4 points	Volunteers as appropriate and often leads in group settings. Engages and encourages others.	Willingly participates with instructor and classmates. Engages others.	Reluctantly participates when asked. Seeks easiest duties in groups. Inappropriately challenges others.	Actively avoids involvement when possible. Complains about others. Uses large set of excuses.
	Exceeds expectations (6)	Meets expectations (4-5)	Approaches expectations (2-3)	Falls below expectations (0-1)
Rubric Scoring for Classmates' Presentations 6 points	Attends to classmates' presentations. Effectively questions for clarification or to guide classmates in improving. If missed one presentation session, completes make-up.	Attends to classmates' presentations. If missed one presentation session, completes make-up.	Attends to classmates' presentations. If missed one presentation session, completes make-up.	Misses two or more presentation sessions. Does not attend to classmates' presentations. Does not complete make-up if session was missed.