

GEORGE MASON UNIVERSITY
COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT
PhD in Education Program

EDEP 823 001 –Research Project Part 1: Designing your Study
3 Credits, Spring 2024
Thursdays, 7:20 – 10:00 PM, Thompson Hall 1020, Fairfax Campus
Hybrid – Face-to-Face and Synchronous online

Faculty

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Prerequisites/Corequisites

Required Prerequisites: EDRS 810, EDRS 811, EDRS 812

Recommended Prerequisites: Students should have completed Portfolio II before the start of the semester. Contact instructor and advising committee chair if this is not the case.

University Catalog Course Description

Focuses on the development and implementation of research studies in education. Students will acquire skills regarding developing research questions and a sound methodological approach for their study. First in two-course sequence; second course is not required.

Course Delivery Method

This course will be delivered using lectures, group and electronic discussions, in class activities, and individual/group assignments. This is a hybrid course which means classes will alternate between meeting in person and synchronously online (see course schedule for details).

Learner Outcomes or Objectives

This course is designed to enable students to do the following:

- design and conduct a study of some aspects of human learning within an educational or other relevant setting
- synthesize and apply information in the context of an actual problem
- design the basic components of a small-scale quantitative/qualitative/mixed methods research study
- write clearly and coherently about the conceptual framework, questions, and methods used in a research study
- develop research questions, research hypotheses, and or purpose statement

- demonstrate an understanding of quantitative or qualitative research design identify and address validity issues
- address ethical issues in research, including seeking and receiving IRB approval

Professional Standards

Educational Psychology Program Standards (May 2021)

Standard 1. Candidates will use their knowledge and skills to apply concepts, principles, and theories of learning, cognition, motivation, and development to analyze and design innovative educational activities in diverse applied settings.

Standard 2. Candidates will apply their knowledge of quantitative and qualitative research methods, including basic concepts, principles, techniques, and ethical issues, to read and critique relevant products of research.

Standard 3. Candidates will apply their knowledge and skills of quantitative and qualitative research methods, including basic concepts, principles, techniques, and ethical issues, to conduct research and/or inform practice in diverse applied settings.

Standard 4. Candidates will demonstrate oral and written communication relevant to educational psychology, including knowledge and use of APA style and professional formats (e.g., oral presentations, poster presentations, article abstracts, literature reviews, research proposals, reports).

Standard 5. Candidates will demonstrate professional dispositions relevant to educational psychology such as critical thinking, collaboration, interpersonal communication, intercultural competence, ethical leadership, professionalism, and technological skills.

Required Texts

1) A research methods textbook (from EDRS 810):

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. (4th ed.) Pearson.

OR

Johnson, R. B., & Christensen, L. (2017). *Educational research: Quantitative, qualitative, & mixed approaches* (6th ed.) Sage.

*NOTE: Earlier editions are fine if you have purchased them for other classes.

2) Goodson, P. (2017). *Becoming an academic writer* (2nd ed.) Sage.

3) A book about academic writing (see list on Bb)

4) Other required readings will be available on Blackboard or through GMU's electronic journal or book database.

Recommended Text

American Psychological Association. (2020). *Publication manual of the American Psychological Association* (7th ed). American Psychological Association.

Course Performance Evaluation

Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard, VIA, hard copy).

Course Requirements

It is expected that each of you will:

1. Read all assigned materials for the course
2. Critique, present/discuss assigned readings in class *
3. Participate in classroom activities that reflect critical reading of materials
4. Write a research proposal and present in a poster session *
5. Attend each class session

Course Evaluation

1. Research Proposal: Students will write a research proposal that focuses in a specific content area of interest. The paper should include the following sections: (1) Statement of the Problem; (2) Purpose of the Study; (3) Significance of the Study; (4) Review of Literature; (5) Questions and/or Hypotheses; (6) Design / Procedure; (7) Sample; (8) Measures; (9) Data Collection; and (10) Analysis Plan. Some of these sections are submitted as smaller assignments and the full research proposal will be submitted as a final paper. The paper must adhere to the APA Publication Manual Guidelines.

2. Book Discussion: Each student will select a book on academic writing and read it during the semester. A one page maximum overview of the book will be submitted and students will participate in a book group discussion of academic writing.

2. Poster Presentation: The planned research project will be presented in a poster presentation conference format at the end of the semester following APA presentation guidelines.

3. Human Subjects Proposal Certification and Research Application Submission: Students will be asked to complete Mandatory Training for Persons Conducting Research Using Human Subjects. Information is available online: <http://research.gmu.edu/ORSP/HumanTraining.html> The training can be accessed from: <http://www.citiprogram.org> Copy and paste your completion certificate into a word document or save as a PDF, then upload a copy of the certificate file to Blackboard. In addition, students will complete the research application and submit it to the Human Subjects Institutional Review Board for review.

4. **Class participation and Attendance:** Because of the importance of lecture and discussion to your total learning experience, I wish to encourage you to both attend and participate in class regularly. Attendance, punctuality, preparation, and active contribution to small and large group efforts are essential. These elements of your behavior will reflect the professional attitude implied in the course goals and will account for 10% of your course grade. With reference to the grading scale described later in this syllabus, you will note that this percentage is equivalent to a full letter grade. Students who must miss a class must notify the instructor (preferably in advance) and are responsible for completing all assignments and readings for the next class. Late assignments will not be accepted unless a serious emergency arises and the instructor is notified promptly.

Grading Policy

Research Problem Statement (Research Question)	5%
Overview (Intro/Statement of Problem/Significance)	10%
Review of Literature	15%
Methods (Design/Procedure/Sample/Measures)	15%
Human Subjects Citi-training and IRB proposal submission	5%
IRB responses submitted and approval received	5%
Book Discussion- Academic Writing	10%
Poster Presentation (5% poster + 5% presentation)	10%
Research Proposal (with all previous comments addressed)	15%
Class Participation and Attendance	10%

A+	98-100%	A	93-97.49%	A-	90-92.49%
B+	88-89.49%	B	83-87.49%	B-	80-82.49%
C	70-79.49%	F	below 70%		

Professional Dispositions

See <https://cehd.gmu.edu/students/policies-procedures/>

Core Values Commitment

The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles: .

GMU Policies and Resources for Students

Policies

- Students must adhere to the guidelines of the Mason Honor Code (see <https://catalog.gmu.edu/policies/honor-code-system/>).
- Students must follow the university policy for Responsible Use of Computing (see <https://universitypolicy.gmu.edu/policies/responsible-use-of-computing/>).
- Students are responsible for the content of university communications sent to their Mason email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students **solely** through their Mason email account.
- Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see <https://ds.gmu.edu/>).
- Students must silence all sound emitting devices during class unless otherwise authorized by the instructor.

Campus Resources

- Support for submission of assignments to VIA should be directed to viahelp@gmu.edu or <https://cehd.gmu.edu/aero/assessments> . Questions or concerns regarding use of Blackboard should be directed to <https://its.gmu.edu/knowledge-base/blackboard-instructional-technology-support-for-students/>.
- For information on student support resources on campus, see <https://ctfe.gmu.edu/teaching/student-support-resources-on-campus>

Notice of mandatory reporting of sexual assault, sexual harassment, interpersonal violence, and stalking:

As a faculty member, I am designated as a “Non-Confidential Employee,” and must report all disclosures of sexual assault, sexual harassment, interpersonal violence, and stalking to Mason’s Title IX Coordinator per [University Policy 1202](#). If you wish to speak with someone confidentially, please contact one of Mason’s confidential resources, such as [Student Support and Advocacy Center](#) (SSAC) at 703-380-1434 or [Counseling and Psychological Services](#) (CAPS) at 703-993-2380. You may also seek assistance or support measures from Mason’s Title IX Coordinator by calling 703-993-8730, or emailing titleix@gmu.edu.

For additional information on the College of Education and Human Development, please visit our website <https://cehd.gmu.edu/students/> .

TENTATIVE CLASS SCHEDULE

Date	Class	Topic	Reading	Due
1/18	1	Intro Review Syllabus <i>In person</i>	Course Syllabus	Free write (upload to Bb - end of class)
1/25	2	Identifying and Framing a Research Problem <i>Synchronously online</i>	Creswell Ch. 1, 5 & 6 OR J&C Ch. 1 & 2 APA Div 15 webinar OR Activity Articles	5-6 Sentence Paragraph Discussion Board posting on Developing Habits for Educational Research and Academic Writing Activity *select book
2/1	3	Conducting a Literature Review Specifying a Purpose <i>In person</i>	Creswell Ch. 2 OR J&C Ch. 4 Suri & Clark (2009) Goodson Appendix A	Research Problem Statement
2/8	4	Theoretical /Conceptual Framework <i>Synchronously online</i>	Creswell Ch. 3 *Goodson Ch. 1-3	CITI Training
2/15	5	Research Design <i>In person</i>	Creswell Ch. 8 -10 OR J&C Ch. 12-17 *Goodson Ch. 7	Draft of Initial Design Thoughts
2/22	6	Participants and Sampling Power Analysis <i>Synchronously online</i>	Creswell Ch. 8 -10 J&C Ch. 12-17 Sampling sections of at least 2 articles in your content area and 2 articles using your intended methodological approach	Find articles in your content area and methodological approach and take notes about their sampling strategies –what they did and why they did it

				Introduction Section Due _____
2/29	7	Collecting Data Measurement <i>In person</i>	Creswell Ch. 7 OR J&C Ch. 7-9 Qual: Data collection sections of at least 2 articles in your content area and 2 using your intended methodological approach Quant: Measures section of at least 2 articles that use your DV measures and measures section of articles of at least 2 of your other measures.	Literature Review Headings
3/7		SPRING BREAK		
3/14	8	Review of IRB application and IRB forms and process <i>Synchronously online</i>	Creswell Ch. 4 OR J&C Ch. 6 Review GMU IRB website	Planned Methods (bullet points)
3/21	9	Writing Day /Individual Meetings <i>In person</i>	Creswell Ch. 4 OR J&C Ch. 5 *Goodson Ch. 8	Literature Review Section due _____ Peer Feedback on Methods
3/28	10	Data Analysis Plan <i>Synchronously online</i>	Creswell Ch. 8 OR J&C Ch. 19 & 20 Analysis section of two articles using your methodological approach	IRB draft due _____ List of Data
4/4	11	Book Discussion <i>Synchronously online</i>		IRB Application Submitted by _____
4/11	12	Study Implications	J&C Ch. 11	Methods due _____

		<i>In person</i>		
4/18	13	Study Limitations <i>Synchronously online</i>	TBD *Goodson Ch. 4-6	
4/25	14	Poster Presentations In person		
5/2	15			Research Proposal due

CRITERIA	LEVEL OF PERFORMANCE			
	Distinguished	Proficient	Basic	Un-satisfactory
Purpose & Significance of the Study Review of Literature	The student described in detail the purpose and significance of study. The student provided a complete high quality literature review which cites relevant references, cites current as well as earlier research and deals with relevant theories or theoretical frameworks	The student described in detail the purpose and significance of study. The student provided a quality literature review citing relevant research	The student described in detail the purpose of the study. The student provided a basic literature review	The student was unable to provide purpose of the study or a literature review
Quantitative Proposals: Hypothesis	The student clearly stated a significant and testable hypothesis. The hypothesis is important enough to be researched in terms of its significance concerning what is already known about the areas of research and/or an existing theory or theoretical framework	The student stated a significant and testable hypothesis.	The student stated a testable hypothesis.	The student was unable to state a hypothesis.
Qualitative research proposals: Research Questions	The student provided a research question well- aligned with the other dimensions of the research design, a sufficient rationale for choosing a particular question, and described a process that allows for evolution of the research question	The student provided a research question well-aligned with other dimensions of the research design.	The student provided a research question somewhat aligned to the other dimensions of the research design.	The student failed to provide a research question.
Methods: Quantitative	The student provided a feasible design which maximizes the reliability and validity of the measures of her/his variables. The design of the study includes design, procedures, sample measures	The student provided a feasible design which addresses the reliability and validity of the measures of her/his variables. The design of the study includes design, procedures, sample measures	The student provided a design which includes design, procedures, sample measures.	The student was unable to provide a design for the study

Methods: Qualitative	The student provided clear and justifiable rationale for the selection of a study site/sample, an outline of data collection procedures that are flexible and iterative, and an account of how the process of analysis will be approached.	The student provided sufficient rationale for the selection of the study site/sample, outlined data collection procedures and gave an account of how the process of analysis will be approached.	The student provided some rationale for sample selection, data collection and some outline of procedures and analysis.	The student failed to provide a rationale for sample selection, data collection and analysis.
Data Collection and Results	The student used appropriate statistical techniques, descriptive, inferential to analyze the data (quantitative research). OR the student used appropriate coding and interpretive procedures (qualitative research).	The student used appropriate statistical techniques or qualitative analysis techniques.	The student used appropriate statistical techniques or qualitative analysis techniques.	The student was unable to use appropriate statistical techniques or qualitative analysis techniques.
Discussion Section	The student provided a thorough discussion which includes a discussion of the results, limitation and future research and limitations of the findings	The student provided discussion which includes a discussion of the results, limitation and future research	The student provided a basic discussion of the results	The student was unable to provide a thorough or discussion
Mechanics of Paper	The student provided a well written research proposal which adhered to the APA Publication Manual Guidelines.	The student provided an average written research proposal which adhered to the APA Publication Manual Guidelines.	The student provided a research proposal which missed several vital elements of a research paper outlined in the APA Publication Manual Guidelines.	The student was unable to provide a final draft of the research proposal.
Poster Session	The student provided an excellent poster presentation that adhered to the APA Publication Manual Guidelines.	The student provided a poster presentation that adhered to the APA Publication Manual Guidelines.	The student provided a poster presentation that was missing several key elements	The student was unable to construct a poster presentation