GEORGE MASON UNIVERSITY
COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT
GRADUATE SCHOOL OF EDUCATION
EDUCATIONAL PSYCHOLOGY

EDRS 590 (B01) 3 credits
Educational Research
Summer 2016, Tuesdays & Thursdays 7:20-10pm
Thompson Hall Room L014

PROFESSOR
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Catalog 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.

Course objectives: This introductory research course examines connections among theoretical frameworks, research questions, methods of data collection, analysis and reporting. The purpose of this course is to introduce you to an understanding of quantitative, qualitative, and mixed methods inquiry. This will involve reading about research. You will be introduced 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 of 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.
Learners will begin 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 advocacy and change; and
- Be able to apply technology to the task of conducting education research.

III. EDUCATIONAL PSYCHOLOGY PROGRAM STANDARDS
Across the many courses in the Educational Psychology, a number of standards are addressed. These standards are noted below. Those emphasized most strongly in this course are in bold text.

1. Candidates will demonstrate an understanding of principles and theories of learning, cognition, motivation, and development as they apply to a wide variety of contemporary learning contexts.
2. Candidates will use their *knowledge, skills, and dispositions* to apply principles and theories of learning, cognition, motivation, and development to analyze and develop instruction in applied settings.
3. **Candidates will demonstrate an understanding of the basic concepts, principles, techniques, approaches, and ethical issues involved in educational research.**
4. **Candidates will use their knowledge of quantitative and qualitative research methodology to critically read and evaluate quantitative and qualitative research articles.**
5. **Candidates will use their knowledge of quantitative and qualitative research methodology to develop a research proposal and conduct research.**
6. **Candidates will demonstrate critical thinking, oral presentation, technological, and writing skills as they are used in the profession. These include:**
   - **Knowledge and use of APA style**
   - **Oral presentations**
   - **Poster presentations**
   - **Article abstracts**
   - **Research proposals**
   - **Literature reviews**
   - **Technological skills (including library/reference skills, interactive displays skills, data analysis skills)**

Format: The class sessions will include both lecture and discussion as well as group work.

Required Materials:
McMillan, J. H. (2016). Fundamentals of Educational Research (7th Ed.) Boston, MA: Pearson

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

Class Preparation: Information on course assignments and slides for class lectures are available on the course blackboard site.

Class Attendance & Participation: Students are expected to come to class on time, complete assignments, and participate in class discussions.

ASSESSMENT:

HSRB CITI Training Module Completion (10%)
GMU requires a Mandatory Training for Persons Conducting Research Using Human Subjects. Seven learner modules in the Basic Course are required prior to applying to conduct any research at Mason using human subjects. **For this course, you will be required to complete the Basic Course.**
- This online training module can be accessed at http://www.citiprogram.org. (You must complete the required basic course before the optional modules are available).
- Specific directions for how to log on can be found at the GMU Office of Research Subject Protection website:
http://oria.gmu.edu/research-with-humans-or-animals/institutional-review-board/human-subjects-training/
*Turn in a hard copy only (this will be returned to you for your records).

GMU also requires that all researchers (including student researchers) submit a research application to the office of Human Subject Protections PRIOR to conducting research. For this course, you should review the application form for class discussion.
- Application forms and guidelines can be found at the GMU Office of Research Subject Protection website:
http://oria.gmu.edu/research-with-humans-or-animals/institutional-review-board/human-subjects-policies-procedures-forms-and-instructions/

Critique of Two Empirical Research Articles (**10% each):** Students will write a critique of one quantitative intervention study and one qualitative study obtained from a peer-reviewed journal. The critiques should include the following parts: purpose, methods, results, and critical comments as well as your reflections about the article (see Blackboard site for specific instructions).

Research Proposal (*paper*) (40%)
Students will write a research proposal (introduction, literature review, and method sections). This proposal should build on existing research and may replicate and extend previous research studies. The proposal will contain relevant sections specific to the research design (see sample paper on Blackboard as well as pp 41-59 of the APA manual). Organizational headings may vary depending on your research design and the specifics of your individual study. Be sure to refer to the APA manual as well as similar work in your field to help you determine what is critical to include in your own proposal. Also refer to the APA manual for how to format headings and citations appropriately. Turn in a hard copy and place an electronic version on the relevant assignment box Blackboard site.

**There are checkpoints along the way where drafts may be submitted for feedback (noted as CP on the tentative schedule).

Proposal Requirements:
- **Introduction & Literature Review**
  - Brief introduction to the topic & literature review. (If you are replicating and extending a previous study, you should be sure to describe the original work).
  - Statement of purpose and research questions.
- **Method**
  - **Research Design**
  - **Participants** (when applicable, should include setting, subjects, interventionists)
  - **Measures**
  - **Intervention** (when applicable, should include control/alternate treatment)
  - **Procedures** (when applicable, should include study procedures, data collection procedures, scoring procedures, fidelity of treatment procedures)
  - **Ethical Considerations**
  - **Proposed Preliminary Data Analyses**
- **References**

Exam (20%): One exam will cover the material from the class and textbook and include multiple choice as well as short answer questions.

In Class Assignments, Participation, and Attendance Policy (10%): Students will be asked to work individually or in groups of 2-3 students in class assignments throughout the semester. 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. 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

GRADING SCALE:
Grades will be assigned based on the following:

A+ = 98 – 100%	A = 93 – 97.99%	A- = 90 – 92.99%
B+ = 88 – 89.99%	B = 83 – 87.99%	B- = 80 – 82.99%
C = 70 – 79.99%	F < 70%	

Final grades are based in the assessments described above. "Extra credit" is not available.

Late Assignments: *As a general rule, late assignments will not be accepted*. If you believe you have EXCEPTIONAL circumstances and wish to negotiate to have extra time to complete course work, you must discuss this with me before the day the assignment is due. (Negotiating means that you will be sacrificing a portion, perhaps substantial, of your grade for extra time).

TK20 PERFORMANCE-BASED ASSESSMENT SUBMISSION REQUIREMENT
Not applicable for this course

COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT STATEMENT OF EXPECTATIONS:
Student Expectations:

- *Honor Code:* Students must adhere to the guidelines of the George Mason University Honor Code [See http://oai.gmu.edu/the-mason-honor-code/].
    - o Students must not give or receive unauthorized assistance.
    - o Plagiarism is also a violation of the honor code. Please note that:
        - ▪ "Plagiarism encompasses the following:
            1. Presenting as one's own the words, the work, or the opinions of someone else without proper acknowledgment.
            2. Borrowing the sequence of ideas, the arrangement of material, or the pattern of thought of someone else without proper acknowledgment."
            (from Mason Honor Code online at http://mason.gmu.edu/~montecin/plagiarism.htm)
        - ▪ Paraphrasing involves taking someone else's ideas and putting them in your own words. When you paraphrase, you need to cite the source.
        - ▪ When material is copied word for word from a source, it is a direct quotation. You must use quotation marks (or block indent the text) and cite the source.
        - ▪ Electronic tools (e.g., SafeAssign) may be used to detect plagiarism if necessary.
        - ▪ Plagiarism and other forms of academic misconduct are treated seriously and may result in disciplinary actions.
- *Responsible Use of Computing:* Students must follow the university policy for Responsible Use of Computing [See http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/
- *Disability Services and Accommodations:* 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/].
- *Email Communication:* Students 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 communication from the university, college, school, and program will be sent to students solely through their Mason email account.
- *Sound Emitting Devices:* Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.
- *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. http://cehd.gmu.edu/values/

Campus Resources:
- 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/].
- The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing [See http://writingcenter.gmu.edu/].
- For additional information on the College of Education and Human Development, Graduate School of Education, please visit our website [See http://gse.gmu.edu/]

ADDITONAL CLASS POLICIES

Assignments
All assignments are to be posted on Blackboard before the start of class on the assigned date. Late assignments are subject to a penalty of 10% of the award for every day the assignment is overdue. If you believe you have EXCEPTIONAL circumstances and wish to negotiate to have extra time to complete course work, you must discuss this with me before the day the assignment is due. (Negotiating may mean that you will be sacrificing a portion of your grade for extra time). All assignments are to be posted on Blackboard. *DO NOT* slide assignments under my office door.

Electronic Device Use in Class
During class time, please refrain from checking email or conducting activities on the computer, cell phone, or other electronic device that are not directly related to the class session.

Class Environment
Help to foster a positive learning environment by respecting the opinions and contributions of others. Also, cell phones should be turned off or put on silent mode so as to not affect the learning of those around you.

Tentative Schedule

	Class	Topic	Reading	Due
6/7	1	Intro: What is Research? Type of Research	Chap 1	
6/9	2	Literature Review	Chap. 4	*Locate Articles for Critique Assignments*
6/14	3	Research Questions, Variables, and Hypothesis	Chap. 3	CP 1: Minimum 5 articles for Literature review
6/16	4	Ethics	Chap. 2	*Examine CITI training info (due class 8)* CP 2: Research question/variables/hypothesis
6/21	5	Sampling	Chap. 5	
6/23	6	Measures & Statistics	Chap. 6	CP 3: Sample
6/28	7	Reliability & Validity	Chap. 7	CP 4: Literature review
6/30	8	Catch up day (if needed) Individual Meetings - Proposals		**CITI training due**
7/5	9	SUMMER RECESS: CLASSES DO NOT MEET		
7/7	10	**EXAM**		
7/12	11	Quantitative Design	Chap. 8 & 9	
7/14	12	Quantitative Design & Data Analysis	Chap. 10	
7/19	13	Qualitative Design	Chap. 11	**Quantitative Critique Due**
7/21	14	Qualitative Design & Data Analysis	Chap. 12	CP 5: Design section
7/26	15	Mixed Methods Conclusions	Chap. 13 & 15	**Qualitative Critique Due**
7/28	16			**Research Proposal Due by 10 pm**