**George Mason University**
**College of Education and Human Development**
**Educational Psychology**

EDRS 590 B01 – Educational Research
3 Credits, Summer 2023
05/30/2023-07/26/23
Synchronous Online-Blackboard

**Faculty**

| | |
|---|---|
| Name: | Jeff Vomund, Ph.D. Cand. |
| Office Hours: | Tuesdays 3:00 – 4:15; and available by appointment |
| Virtual Office Location: | Zoom link: |
| | • Link also located on Blackboard page side bar |
| Email Address: | jvomund@gmu.edu |

**Prerequisites/Corequisites**

None.

**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.

**Course Overview**

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 an understanding of quantitative, qualitative, and mixed methods inquiry. This will involve reading about research. Students 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.

**Course Delivery Method**

This course will be delivered online (76% or more) using a synchronous format via Zoom meetings. We will also use the Blackboard Learning Management System (LMS) housed in the MyMason portal. You will log in to the Blackboard (Bb) course site using your Mason email name (everything before @masonlive.gmu.edu) and email password. The course site will be available on May 29.

**Under no circumstances, may candidates/students participate in online class sessions (either by phone or Internet) while operating motor vehicles. Further, as expected in a face-to-face class**

**meeting, such online participation requires undivided attention to course content and communication.**

*Technical Requirements*
To participate in this course, students will need to satisfy the following technical requirements:

- High-speed Internet access with standard up-to-date browsers. To get a list of Blackboard's supported browsers see:
  https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#supported-browsers
  To get a list of supported operation systems on different devices see:
  https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#tested-devices-and-operating-systems
- Students must maintain consistent and reliable access to their GMU email and Blackboard, as these are the official methods of communication for this course.
- Students will need a headset microphone for use with the Blackboard Collaborate web conferencing tool.
- Students may be asked to create logins and passwords on supplemental websites and/or to download trial software to their computer or tablet as part of course requirements.
- The following software plug-ins for PCs and Macs, respectively, are available for free download:
  - Adobe Acrobat Reader: https://get.adobe.com/reader/
  - Windows Media Player:
    https://support.microsoft.com/en-us/help/14209/get-windows-media-player
  - Apple Quick Time Player: www.apple.com/quicktime/download/

*Expectations*
- <u>Course Week:</u> Because we have regularly scheduled class meetings on Tuesdays and Thursdays from 4:30 – 7:10 pm, our course week will begin on Tuesdays.
- <u>Log-in Frequency:</u>
  Students must actively check the course Blackboard site and their GMU email for communications from the instructor, class discussions, and/or access to course materials at least 3 times per week.
- <u>Participation:</u>
  Students are expected to actively engage in all course activities throughout the semester, which includes viewing all course materials, completing course activities and assignments, and participating class discussions and activities, the online discussions, and group interactions.
- <u>Technical Competence:</u>
  Students are expected to demonstrate competence in the use of all course technology. Students who are struggling with technical components of the course are expected to seek assistance from the instructor and/or College or University technical services.
- <u>Technical Issues:</u>

Last revised October, 2019

Students should anticipate some technical difficulties during the semester and should, therefore, budget their time accordingly.  Late work will not be accepted based on individual technical issues.

- Workload:
  Please be aware that this course is **not** self-paced.  Students are expected to meet *specific deadlines* and *due dates* listed in the **Class Schedule** section of this syllabus.  It is the student's responsibility to keep track of the weekly course schedule of topics, readings, activities, and assignments due.

- Instructor Support:
  Students may schedule a one-on-one meeting to discuss course requirements, content or other course-related issues. Students should email the instructor to schedule a one-on-one session, including their preferred meeting method and suggested dates/times.

- Netiquette:
  The course environment is a collaborative space.  Experience shows that even an innocent remark typed in the online environment can be misconstrued.  Students must always re-read their responses carefully before posting them, so as others do not consider them as personal offenses.  *Be positive in your approach with others and diplomatic in selecting your words*.  Remember that you are not competing with classmates, but sharing information and learning from others.  All faculty are similarly expected to be respectful in all communications.

- Accommodations:
  Online learners who require effective accommodations to insure accessibility must be registered with George Mason University Disability Services.

**Learner Outcomes or Objectives**
This course is designed to enable students to do the following:
• 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.

**Professional 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.

**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**
McMillan, J. H. (2022). *Fundamentals of educational research (8th ed.)*. Boston, MA: Pearson.

**AND**

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

**Course Performance Evaluation**

Students are expected to submit all assignments on time in the manner outlined by the instructor.

It is expected that each student will:
1. Read all assigned course materials
2. Participate in Individual and Group Blackboard Activities
3. Critique and/or discuss assigned readings
4. Submit all written assignments on time via Blackboard

**Assignments and/or Examinations**
***HSRB CITI and Academic Integrity Training Modules*** (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. GMU also has a web-based training module on Academic Integrity that will be required for this course.

*Turn in an electronic copy only via Blackboard (you should also keep that electronic copy 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/institutionalreview-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 30%)***
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. 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.

**Proposal Requirements** (Organizational headings may vary depending on your research design and the specifics of your individual study):
- 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
- Limitations
- References

***Research Proposal Checkpoints (10%).*** Checkpoints throughout the semester require students to submit drafts for feedback at certain points.

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

***Participation and Attendance Policy (10%)*** Students are expected to come to class on time, complete assignments, and participate in class activities. Information on course assignments, weekly quizzes, and notes for class lectures are available on the course Blackboard site.

**Other Requirements**
Format for written work:
- 1-inch margins on all sides, double-spaced, 12-point Times New Roman, Calibri, or Ariel font.
- Include the following information: title, name, date, professor, course number.
- Fully proofread for spelling, grammar, and clarity errors; citation and references in APA format.

*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). [e.g., attendance, participation]*

**Grading**
Your final grade for this class will be 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% | |

**Professional Dispositions**
See https://cehd.gmu.edu/students/polices-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: http://cehd.gmu.edu/values/.

**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 703-9932380. 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/.**

**Class Schedule**

| Date | Topics | Readings | Key Due Dates |
|---|---|---|---|
| **Week 0** | Introduction to Instructor, Course, and Peers | • Review Syllabus and Course Requirements<br>• Review Instructor Introduction<br>• Take a tour of the Blackboard site | |
| **Week 1**<br>**5/30 and 6/1** | • Introduction to Research<br>• Ethical Issues | • McMillan, chs. 1 & 2<br>• APA, chs. 1 & 8<br><br>"Is the question researchable?" | CITI Training and Academic Integrity Training<br><br>**Due Monday, 6/5** |
| **Week 2**<br>**6/6 and 6/8** | • Research problems, questions, variables, & hypothesis<br>• Literature Review | • McMillan, chs. 3 & 4<br>• APA, chs. 2-3, 9-10 | CP1: Research Questions for Research Proposal<br><br>**Due Monday, 6/12** |
| **Week 3**<br>**6/13 and 6/15** | • Sampling<br>• Measures, Reliability, & Validity | • McMillan, chs. 5, 6, & 7 | Exploring the different components of a Research Article<br><br>CP2: Annotated bibliography of 5 Articles for Research Proposal<br><br><br>**Due Monday, 6/19** |
| **Week 4**<br>**6/20 – 6/22** | • Basic Statistics<br>• Non-experimental & experimental design | • McMillan, chs. 8 & 9<br>• APA, chs. 6 & 7 | Locate and email articles for critique assignments<br><br>CP3: Propose a Sampling Approach for Research Proposal<br><br><br>**Due Monday, 6/26** |

| Date | Topics | Readings | Key Due Dates |
|------|--------|----------|---------------|
| **Week 5**<br>**6/27 – 6/29** | Quantitative Data Analysis--<br>Inferential Statistics | • McMillan, ch. 10 | Midterm Review Activity<br><br>CP4: Measures<br>**Due Friday, 6/30** |
| **Week 6**<br>**7/4 - 7/6**<br>**(No class on July 4th !!!)** | Midterm Exam | | **7/6, in Class Exam** |
| **Week 7**<br>**7/11- 7/13** | • Qualitative Design<br>• Qualitative Data Analysis | • McMillan, chs. 11, 12, & 13 | Quantitative Article Critique<br>**Due Friday, 7/14**<br><br>CP5: Literature review<br>**Due Monday, 7/17** |
| **Week 8**<br>**7/18- 7/20** | • Mixed Methods<br>• Individual meetings | • McMillan, chs. 14 & 15 | Qualitative Article Critique<br>**Due Friday, 7/21**<br><br>CP6: Design section<br>**Due Monday, 7/24** |
| **Week 9**<br>**7/25** | 7/25 – Final Class: | Wrap up, final questions, individual support on Research Proposal | Research proposal due<br>**Thursday, 7/27** |

**\* Note:** Faculty reserves the right to alter the schedule as necessary, with notification to students.