

**COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT
EDUCATIONAL PSYCHOLOGY**



**EDEP 823 DL1
Research Project in Educational Psychology: Sequence I
Spring 2021
Monday 4:30-7:10 PM
Online**

Instructor: Dr. Angela Miller
Office phone: 703-993-5590
Office location: West 2007
Office hours: Wednesday 3:00- 4:00 & by appointment
Email addresses: amille35@gmu.edu

COVID 19 Procedures: Spring 2021

Students, please be aware of and follow all policies and procedures for Mason's Safe Return to Campus: <https://www2.gmu.edu/Safe-Return-Campus>

COURSE DESCRIPTION:

A. Prerequisites: EDEP820, EDEP821, EDEP822 (if doctoral focus is educational psychology).
Doctoral students of other areas may take without prerequisites.

B. Focuses on the development and implementation of research studies in educational psychology. Students will acquire skills regarding developing research questions and a sound methodological approach for their study. First in two course sequence.

Course Delivery Method

This course will be delivered online (76% or more) using an asynchronous format via 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.

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 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

- Course Week: Our course week will begin on the day that our synchronous meetings take place as indicated on the Schedule of Classes.
- Log-in Frequency: 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 2 times per week. In addition, students must log-in for all scheduled online synchronous meetings.
- Participation: 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 in course discussions and group interactions.
- Technical Competence: 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.
- Technical Issues: 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. Those unable to come to a Mason campus can meet with the instructor via telephone or web conference. 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.

NATURE OF COURSE DELIVERY:

This course consists of lectures, group and electronic discussions, in class activities, and individual/group assignments.

LEARNER OUTCOMES:

This course is designed to enable students to:

- 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 research study, including descriptive statistics and inferential statistics
- write clearly and coherently about the conceptual framework, questions, and methods used in a research study
- deal appropriately with ethical issues in research
- develop research hypotheses that relate to research questions
- demonstrate an understanding of quantitative or qualitative research design through completion of a project
- identify threats to internal and external validity in simulated studies, and their own research design
- develop and reinforce their critical thinking, oral, and writing skills

PROFESSIONAL STANDARDS:

The program goals are consistent with the following Learner-Centered Psychological Principles outlined by the American Psychological Association Presidential Task Force in Education (APA, Division 15).

- Principle 1: The Nature of Learning Process
- Principle 2: Goals of the Learning Process

- Principle 3: Construction of Knowledge
- Principle 4: Strategic Thinking
- Principle 5: Thinking about Thinking
- Principle 6: Context of Learning
- Principle 7: Motivational and Emotional Influences on Learning
- Principle 8: Intrinsic Motivation to Learn
- Principle 9: Effects of Motivation on Effort
- Principle 11: Social Influences on Learning
- Principle 13: Learning and Diversity

For more information please see:

American Psychological Association (1997). *Learner-Centered Psychological Principles: Guidelines for the Teaching of Educational Psychology in Teacher Education Programs*. Retrieved October 14, 2002 from <http://www.apa.org>

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.) Upper Saddle River, NJ: Pearson.

OR

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

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

- 2) Goodson, P. (2017). *Becoming an academic writer* (2nd ed.) Los Angeles, CA: 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 TEXTS:

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

COURSE REQUIREMENTS AND EVALUATION CRITERIA:

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/polices-procedures/>

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 <http://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 <http://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 Tk20 should be directed to tk20help@gmu.edu or <https://cehd.gmu.edu/aero/tk20>. Questions or concerns regarding use of Blackboard should be directed to <http://coursessupport.gmu.edu/>.
- 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, interpersonal violence, and stalking:

As a faculty member, I am designated as a “Responsible Employee,” and must report all disclosures of sexual assault, 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 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/>

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/>.

TENTATIVE CLASS SCHEDULE

| Date | Class | Topic | Reading | Due |
|-------------|--------------|---|--|---|
| 1/25 | 1 | Intro Review Syllabus | Course Syllabus | Free write (upload to Bb - end of class) |
| 2/1 | 2 | Identifying and Framing a Research Problem | 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 |
| 2/8 | 3 | Conducting a Literature Review Specifying a Purpose | Creswell Ch. 2 OR J&C Ch. 4 Suri & Clark (2009) Goodson Appendix A | Research Problem Statement |
| 2/15 | 4 | Theoretical /Conceptual Framework | Creswell Ch. 3 *Goodson Ch. 1-3 | CITI Training |
| 2/22 | 5 | Research Design | Creswell Ch. 8 -10 OR J&C Ch. 12-17 *Goodson Ch. 7 | Draft of Initial Design Thoughts |
| 3/1 | 6 | Participants and Sampling Power Analysis | 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 3/5 |

| | | | | |
|------|----|---|--|---|
| 3/8 | 7 | Collecting Data Measurement | 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 |
| 3/15 | 8 | Review of IRB application and IRB forms and process | Creswell Ch. 4 OR J&C Ch. 6 Review GMU IRB website | Planned Methods (bullet points) |
| 3/22 | 9 | Writing Day /Individual Meetings | Creswell Ch. 4 OR J&C Ch. 5 *Goodson Ch. 8 | Literature Review Section due 3/26 Peer Feedback on Methods |
| 3/29 | 10 | Data Analysis Plan | Creswell Ch. 8 OR J&C Ch. 19 & 20 Analysis section of two articles using your methodological approach | IRB draft due 4/2 List of Data |
| 4/5 | 11 | Book Discussion | | IRB Application Submitted by 4/9 |
| 4/12 | 12 | Study Implications | J&C Ch. 11 | Methods 4/16 |
| 4/19 | 13 | Study Limitations | TBD *Goodson Ch. 4-6 | |

| | | | | |
|------|----|----------------------|--|------------------------------|
| 4/26 | 14 | Poster Presentations | | |
| 5/3 | 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 paper which adhered to the APA Publication Manual Guidelines. | The student provided an average written research paper which adhered to the APA Publication Manual Guidelines. | The student provided a research paper 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 paper |
| 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 |