

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

EDRS 630-001, 12878: Educational Assessment 3 Credits, Spring 2017 Mondays, 4:30-7:10, Thompson Hall, Room L018

**FACULTY** 

Lori C. Bland, Ph.D., Associate Professor

**Office hours:** By appointment

e-mail hours: Standard business hours, M-F

Office location: West Building, Room 2006, Fairfax Campus

Office phone: 703-993-5047 Email address: lbland2@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 you to an understanding of quantitative, qualitative, and mixed methods inquiry. This will involve reading about research and reading 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. The general intent of this 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:** The class sessions will include lecture, discussion, and individual and group work.

#### **LEARNER OUTCOMES:**

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 advocacy and change; and
- Be able to apply technology to the task of conducting education research.

# PROFESSIONAL STANDARDS: EDUCATIONAL PSYCHOLOGY PROGRAM STANDARDS

Across the many course in the Educational Psychology program, a number of standards will be 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 methods to critically read and evaluate quantitative and qualitative research articles.
- 5. Candidates will use their knowledge of quantitative and qualitative research methods 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 display skills, data analysis skills)

#### **REQUIRED TEXTS AND READINGS:**

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

McMillan, J. H. (2016). *Fundamentals of educational research* (7th Ed.) Boston, MA: Pearson. **Article readings will be assigned weekly and posted to the course BlackBoard (BB).** 



#### **COURSE PERFORMANCE EVALUATION:**

#### A. Assignments and Examinations

- 1. Classwork/Homework Responsibilities (10 points)
  - a. Throughout the course, opportunities for practicing research skills will be provided in class or for homework. The purpose for class and homework assignments is to promote mastery of research. These assignments provide students with opportunities for sense-making, skills practice, and consultation.
  - Directions will be posted to BB, included within the presentation materials, or distributed in class. It is your responsibility to ensure that you locate these materials.
  - c. Combined Classwork/Homework assignments: Weekly articles are required as part of the class discussion and will include a written assignment. These articles and the assignment will be posted to BB.
  - d. **In-class Assignments:** All in class assignments are to be completed by the end of class and e-mailed to the professor.
  - e. **Homework Assignments:** All homework assignments must be e-mailed to the professor **before** the next class starts.
  - f. **Assignment of Credit for Individual Classwork/Homework:** Zeros will be assigned for all missing classwork/homework. It is your responsibility to get your work in on time. **There will be no reminders.**
  - g. **Assignment of Credit for Group Classwork/Homework:** If you work in a group, it is the responsibility of the student who e-mails the work to cc all students in the group and to ensure that ALL group names are placed on the document. Zeros will be assigned to all parties in the group for missing names or missing work. In addition, all group members will receive the same group for the work, unless peers score each other. In the event of peer scoring, the average score for each peer will be assigned to the peer, and the average score for all peers will be assigned to the group.
- 2. **Quizzes** (**10 points**): Throughout the course, I will give unannounced quizzes at the beginning of class. No make-ups will be allowed.

#### 3. Human Subjects CITI Training Module Completion (10%)

- a. GMU requires the Collaborative Institutional Training Initiative (CITI)
  Training for human subjects research. It is **mandatory** training for all persons conducting research with human subjects. There are seven (7) learner modules in the basic course which are required prior to applying to conduct any research at Mason using human subjects. **For this course, you will be** required to complete the entire Basic Course.
- This online training module can be accessed at <a href="https://www.citiprogram.org">https://www.citiprogram.org</a>
   (You must complete the required basic course before the optional modules are available).
- c. Specific directions for how to log on can be found at the GMU Office of Research Integrity and Assurance (ORIA) website: http://oria.gmu.edu/



- d. E-mail the pdf of the certificate of completion by the beginning of the second class.
- e. GMU also requires that all researchers (including student researchers) submit a research application to ORIA and that MUST BE APPROVED by ORIA PRIOR to conducting research. You will review and practice logging into IRBnet and completing the appropriate forms related to your research proposal. Information about IRBnet and the application guidelines can be found at <a href="http://oria.gmu.edu/irbnet/">http://oria.gmu.edu/irbnet/</a>. It is your responsibility to complete the citi training and review the oria and irbnet websites.

#### 4. Critique of Two Empirical Research Articles (10% each):

- a. Students will write **two** critiques of **two different empirical research** articles:
  - i. One critique of one quantitative intervention/treatment study; and
  - ii. One critique of one qualitative study.
- b. Both articles must be obtained from a **peer-reviewed** journal.
- c. The critiques should include the following parts:
  - i. Purpose/Introduction/Literature Review
  - ii. Methods
  - iii. Results
  - iv. Critical comments about each section with your reflections about the article (see BB for specific instructions and guidelines).

#### 5. Research Proposal Paper (40%)

- a. Students will write a research proposal.
- b. Students have two options for the proposal:
  - i. The proposal must build on existing research and extend previous research studies with an original idea. OR,
  - ii. The proposal may replicate and, then, extend a previous research study.
- c. The proposal will contain relevant sections specific to the research design (see the Appendix of the APA manual, pp. 247-250, *Journal Article Reporting Standards (JARS): Information Recommended for Inclusion in Manuscripts that Report New Data Collections Regardless of Research Design*). Organizational headings may vary depending on your research design and the specifics of your individual study. In addition to the APA manual, ensure that you refer to similar work in your field to help you determine the sections and information that is critical to include in your own proposal.
- d. You MUST also follow APA style in your proposal. This is difficult, initially, because there are many rules that you MUST follow. You should attempt to memorize this style as you will be using this style within ALL of your coursework and in your future jobs. Therefore, refer to the APA manual for how to format headings, citations in text, references, and all other style requirements.
- e. E-mail the proposal.



- f. Required sections are listed below with some instructions. Additional instructions will also be provided on BB. The research proposal paper must include the sections listed below. BULLETS ARE NOT ACCEPTABLE. Written text for all sections is required as this is a paper. Sections include:
  - i. **Abstract:** This is a 150 word summary of your entire proposal, with sentences summarizing each section. If you are replicating and extending a previous study, ensure that you state this in the abstract.
  - ii. **Introduction:** This is one page (about 275-300 words). The introduction provides a brief introduction to the topic, the need for your research, and the purpose for your paper. The purpose statement(s) will include your research goals. If you are replicating and extending a previous study, ensure that you state this in the introduction.

#### iii. Literature Review:

- 1. The literature review should be about 10 pages, with a minimum of 15 articles cited.
- 2. The focus of a literature review is on reviewing original research that has been published in peer-reviewed, academic journals. A second focus is on explaining how the research is related to the theoretical literature. Both the research literature and the theoretical literature should be primary sources. Secondary sources are not acceptable for this paper. This should be a critical analysis of the literature, identifying the gaps in the literature, and lead to the needs for your research.
- 3. The literature review should include a theoretical framework, which is the theory you will be using to guide your research.
- 4. The literature review ends with a statement of purpose for the research and your specific research questions.
- 5. If you are replicating and extending a previous study, describe the original work and explain your rationale for the replication and extension.
- iv. **Method:** The methods section should follow the APA guidelines as appropriate to the study. Sub-headings within methods will likely include the following:
  - 1. Research Design: type of study and design
  - 2. Participants: such as setting, subjects, interventionists per APA (as applicable)
  - 3. Measures: include any tests or surveys that you plan to use. (Since this is NOT a measure development class, my expectation is that you will use extant (pre-existing) measures.
  - 4. Intervention/Treatment: include control or comparison (alternate or "business as usual" treatment) if applicable to your study
  - 5. Procedures: (when applicable, should include study procedures, data
  - 6. collection procedures, scoring procedures, fidelity of treatment procedures, validity)
  - 7. Procedures for Ethical Considerations: procedures used to ensure adherence to human subjects protocol



- 8. Proposed Preliminary Data Analysis: statistical or coding procedures to be used to analyze data
- v. Anticipated Results (optional): Do not invent results. Provide an outline of paragraphs and tables where results could be inserted.
- vi. Discussion and Implications (optional): Provide an outline of discussion points per APA format.
- vii. References: APA format
- **g. Drafts and Corrections:** Sections of the proposal will be due at different times in the course. Drafts will received feedback. If there are major mistakes in the draft, I will ask for corrections the following week. All other corrections will be due with the next draft of the paper. **All corrections must be made in track changes.**
- **h. Paper requirements:** 20 pages (no more, no less, no partial pages, including references); Times New Roman, 12 pt. font; 1 inch margins, double-spaced; following APA style.

#### **B.** Other Requirements

- 1. Class Participation Responsibilities (10 points)
  - a. Your Learning Responsibilities: I expect that students will be self-regulated about your own learning. This means that you may need to read more information than the assigned readings, that you may need to practice skills multiple times, that you may need to seek help, or that you may need to increase the amount of work that you have previously done for classes, as examples. To support your efforts, I am available to help you. I also allow you to correct your mistakes or otherwise improve your work during the course. You must include all changes to your work in track changes. I will return your revision without further grading if you have not done this.
  - **b.** Communication with the Instructor: I will only communicate on e-mail via your GMU e-mail. I will respond to your e-mails during regular business hours. I do expect you to check your e-mail regularly.
  - c. Attendance: Because of the importance of the lectures, class discussions, and in class work, I expect each student to come to class, to be on time, and to stay for the length of the class. Students who miss a class must notify the instructor by e-mail (preferably in advance). Students who miss class are responsible for recovering information missed from BB, notes from classmates, for completing AND submitting all assignments by the next class, and for doing the readings for the missed class, as well as, the next class. Missing a class is not an excuse for missing assignments or for missing clarifications on assignments that I discussed in class. Students who miss a class will NOT be permitted to make up a missed quiz.
  - d. **Participation:** I expect students to participate in small group and class discussions. I also expect students to understand that all students in the class or group should have an opportunity to respond and participate. Therefore, I expect collegial behaviors in sharing and discussion time. Likewise, I expect all students to ensure that their voices are heard and do participate fully. I



- expect students to demonstrate respect for each other. Over the course of your careers, you will be required to work with a variety of different people. Therefore, my expectations are that you are able to interact and work with all of the students within the class. Therefore, class room pairings and groupings will change from class to class.
- e. **Reading/classwork:** Assigned readings are to be completed <u>before</u> class, in order to engage in full participation in class discussions. Bring text books and other materials to class as we will reference them in class. If the room does not have computer, I will expect you to bring your laptops. There is a class BB site that contains course documents, relevant links, and specific directions for assignments as indicated in the syllabus. Students are required to download pertinent documents for class and to log into BB at the beginning of every class.
- f. **Assignment directions:** I will consider checking the syllabus or BB as part of your responsibilities for class preparedness.
- g. **Distractions:** Cell phones, internet use, e-mail, work for other classes, etc. are not permitted in class. I expect students in class to respect each other and me by turning off cell phones, by not texting, by not using the internet during class, unless as directed for an assignment.
- h. **Late assignments:** I will deduct points from your overall grade for late assignments.
- i. **Overall responsibilities:** Overall, I expect students to be pro-active in their learning, self-regulatory about their assignments, and behave professionally and responsibly in class. I also expect that even if something is not stated in this syllabus, that students will adhere to professional conduct and maintain a professional demeanor in class.
- j. Writing Requirements: General Guidelines for Written Assignments.
  - i. All assignments need to be completed in Word, following APA, and submitted via your GMU e-mail.
  - ii. Follow the style and format provided in the sixth edition of the **Publication**Manual of the American Psychological Association (APA, 2010). I expect you to have purchased the APA Manual and to reference it in completion of your assignments. Being a student in the Educational Psychology program implies that you will also take responsibility for reading the manual and learning the necessary style and format without having to be reminded by the instructor.
  - iii. All course projects should be typed and double-spaced. Pay attention to APA format for margins, headings, citations in text and on the references page, and for writing style.
  - iv. Include a cover page with your name and partner or team member names for assignments. The *cover page* should include the title of the assignment, and your name (and team mate names, if applicable), and date.
  - v. I will not score assignments that do not include names on the assignment itself.



- vi. In terms of general style, the format provided in the sixth edition of the Publication Manual of the American Psychological Association (American Psychological Association, 2010) should be followed.
- vii. You should make a copy of your projects before submitting them to the instructor.
- viii. Do NOT submit paper copies of assignments.

#### C. Grading

1. E-mail all assignments to me using your GMU e-mail account **before class begins on the due date specified**. Letter grades will be assigned as follows:

Points/Percent	Letter Grade
98-100%	A+
94-98%	A
91-93%	A-
88-90%	B+
83-87%	В
80-82%	B-
70-79%	С
Below 70%	F

- 2. Final grades are based in the assessments described above. Credit is earned via completion of the assignments as specified in the syllabus.
- 3. **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).

#### 4. Assignment and Examination Weighting

Major Assignment	Points	Percent
Classwork/Homework	10	10%
Quizzes	10	10%
Human Subjects CITI Training	10	10%
Critique of Two Research Articles		
Quantitative Article Critique	10	10%
Qualitative Article Critique	10	10%
Research Proposal Paper	40	40%
Class Participation and Attendance	10	10%
Total	100	100%



### **Professional Dispositions**

Students are expected to exhibit professional behaviors and dispositions expected of a career educator and of an educational psychologist as defined in the Educational Psychology Handbook at all times. Students are expected to review these dispositions by the second class period.



## PROVISIONAL CLASS SCHEDULE - 2017

Note: Schedule may be altered as necessary, with notification to students.

Date	Topic	Readings	Due
1 /02	Later de dien to Class		
1/23	Introduction to Class		
1/20	Overview of Types of Research Research Problems and	Chan 1 2 2	Evening CITI training info
1/30	Questions, Variables, and	Chap. 1, 2, 3	Examine CITI training info
	Hypotheses		
2/6	Ethical Issues, Validity	BB Reading 1	
2/0	Guest Speaker: Anne Driscoll,	DD Reading 1	
	Education Librarian		
2/13	Reviewing Related Literature	Chap. 4	BB Reading 1 Homework
		BB Reading 2	Assignment Due
2/20	Participants and Sampling	Chap. 5	<b>Locate Articles for Critique</b>
		BB Reading 3	Assignments; Bring Hard
			<b>Copies of Articles to Class</b>
2/27	Educational and Psychological	Chap. 6	CITI training due
	Measurement, Statistics,		
	Reliability, & Validity		
3/6	Quantitative Data Collection	Chap. 7	<b>RP Draft Introduction Due</b>
		BB Reading 4	
3/13	SPRING BREAK		No Class
3/20	Non-experimental Quantitative	Chap. 8	RP Draft Lit. Review Due
	Research Designs, Validity	BB Reading 5	
3/27	Experimental Research Designs,	Chap. 9	
	Validity	BB Reading 6	
4/3	Quantitative Design & Data	Chap. 10	
	Analysis, & Understanding		
4/40	Statistical Inferences		
4/10	Qualitative Design, Credibility	Chap. 11	<b>Quantitative Critique Due</b>
4/4-	and Transferability	BB Reading 7	
4/17	Qualitative Data Analysis	Chap. 12	RP Draft Methods Due if Quant
4/24	Mixed Methods, Action	Chap. 13, 14,	Qualitative Critique Due
F /3	Research, & Conclusions	& 15	RP Draft Methods Due if Qual
5/1	Individual Proposal		No Class Meeting
<b>5</b> (0	Consultations		
5/8	Research Proposal Due		Research Proposal Due



#### **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: <a href="http://cehd.gmu.edu/values/">http://cehd.gmu.edu/values/</a>.

#### **GMU Policies and Resources for Students**

#### **Policies**

- Students must adhere to the guidelines of the Mason Honor Code (see http://oai.gmu.edu/the-mason-honor-code/).
- Students must follow the university policy for Responsible Use of Computing (see <a href="http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/">http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/</a>).
- 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 <a href="http://ods.gmu.edu/">http://ods.gmu.edu/</a>).
- Students must follow the university policy stating that all sound emitting devices shall be silenced during class unless otherwise authorized by the instructor.

#### Campus Resources

- Support for submission of assignments to Tk20 should be directed to <a href="tk20help@gmu.edu">tk20help@gmu.edu</a> or <a href="https://cehd.gmu.edu/aero/tk20">https://cehd.gmu.edu/aero/tk20</a>. Questions or concerns regarding use of Blackboard should be directed to <a href="http://coursessupport.gmu.edu/">http://coursessupport.gmu.edu/</a>.
- The Writing Center 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 <a href="http://writingcenter.gmu.edu/">http://writingcenter.gmu.edu/</a>).
- The 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 <a href="http://caps.gmu.edu/">http://caps.gmu.edu/</a>).

• The Student Support & Advocacy Center staff helps students develop and maintain healthy lifestyles through confidential one-on-one support as well as through interactive programs and resources. Some of the topics they address are healthy relationships, stress management, nutrition, sexual assault, drug and alcohol use, and sexual health (see <a href="http://ssac.gmu.edu/">http://ssac.gmu.edu/</a>). Students in need of these services may contact the office by phone at 703-993-3686. Concerned students, faculty and staff may also make a referral to express concern for the safety or well-being of a Mason student or the community by going to <a href="http://ssac.gmu.edu/make-a-referral/">http://ssac.gmu.edu/make-a-referral/</a>.

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