

**GEORGE MASON UNIVERSITY
COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT**

**EDRS 590: Methods of Educational Research
Summer 2010
June 7, 2010 – July 28, 2010
MW 4:30 – 7:10 pm
Innovation Hall 318 and Blackboard**

PROFESSOR:

**Name: Erin E. Peters, Ph.D., NBCT
Office phone: 703-993-9695
Office location Robinson Hall A, Room 354
Office hours: By appointment
Email address: epeters1@gmu.edu**

COURSE DESCRIPTION:

- A. Prerequisites: Admission to GMU**
- B. Course description from the University Catalog:** Develops skills, insights, and understanding basic to performing research, with emphasis on interpretation and application of research results. Course critiques research and uses findings in educational settings.

NATURE OF COURSE DELIVERY:

Each face-to-face class will include a variety of activities and exercises. Some of the sessions will be conducted through use of the course Blackboard site (www.courses.gmu.edu) by providing questions and online interactions. Web-based resources will also be used through the Blackboard class site.

1. Classes will reflect a balance of activities that encourage the exploration of the use of research in instructional leadership. To promote an atmosphere that allows us to accomplish this, we will:

- a. Start and end on time;
- b. Maintain (flexibly) a written agenda reflecting objectives for each class;
- c. Agree to disagree respectfully during class discussions;
- d. Backup claims with evidence;
- e. Strive to be open to new ideas and perspectives; and
- f. Listen actively to one another.

2. Students are expected to:

- a. Write papers that are well researched, proofed, submitted in a timely fashion, and that conform to APA guidelines;
- b. Participate actively in class discussions in a manner that challenges the best thinking of the class;
- c. Provide constructive feedback to others both on their ideas and on their written work, striving to learn from each other and to test each other's ideas.

3. We will endeavor to create a classroom climate that approximates what we know about communities of practice. As such, it is important that we create a space that allows participants to try out new ideas and voice opinions without fear of ridicule or embarrassment. The hallmark of a community of practice is a balance between openness and constructive feedback; hence, everyone is expected to:

- a. Come fully prepared to each class;
- b. Demonstrate appropriate respect for one another;
- c. Voice concerns and opinions about class process openly;
- d. Recognize and celebrate each other's ideas and accomplishment;
- e. Show an awareness of each other's needs.

STUDENT OUTCOMES:

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:

1. gain critical perspectives in order to understand the validity of education research;
2. use appropriate reference sources to locate publications relevant to a topic of their choice;
3. understand measures of central tendency and dispersion and their application to important education outcomes;
4. Develop an informed perspective on issues in education that is grounded in contemporary research;
5. Understand how teachers or administrators can use research to enhance instruction and inform practice;
6. Use various social science perspectives as the foundation for advocacy and change; and
7. Be able to apply technology to the task of conducting education research.

REQUIRED TEXTS:

Mertler, C. A. & Charles, C. M. (2008). *Introduction to Educational Research* (6th ed). Boston: Pearson Allyn & Bacon.

Galvan, J. L. (2006). *Writing Literature Reviews: A Guide for Students of the Social and Behavioral Sciences* (3rd Ed). Glendale, CA: Pyczak Publishing

Strongly Recommended:

American Psychological Association. (2001). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: Author.

COURSE REQUIREMENTS, PERFORMANCE-BASED ASSESSMENT, AND EVALUATION CRITERIA:**A. Requirements**

Students will have been admitted to a graduate program or admitted as a non-matriculated student to George Mason University. They will be expected to participate in performance based assessments that include in-class participation and online activities.

B. Performance-Based Assessments**1. Critiques of Literature (2): 20% of Grade (10% each)**

- a. Critique one primary research article on your topic of choice using rubric/analysis tool found at the end of the syllabus; submit your analysis AND a copy of the article (**DUE: June 21**).
- b. Read one of the assigned literature reviews in Galvan (C, F, or G) and submit a one page reflection on what you have learned about writing literature reviews. The rubric for this assignment is also found at the end of the syllabus. (**DUE: June 23**).

2. Proposal for Action Research: 50% of Grade

This is the major assignment for this class and is divided into three sections. Each sub-section will be turned in once for instructor feedback (as well as online in Blackboard) and then revised.

- Part One - Asking worthwhile questions about your professional practice (**DUE: June 28 electronically to Erin**) **5 points**
- Part Two - Identifying what is known about your research question (**DUE July 12 electronically to Erin**) **5 points**
- Final Proposal including the revised Part One and Part Two, plus research design (How are you going to answer your questions? What tools will you use? How will you analyze your data?) **30 points (DUE July 28, 7 pm electronically to Erin)**
- In class presentation of your plan. We will use July 19, July 21, and July 26 for these presentations **10 points**

3. In class participation, reading discussions, and online activities (20% of grade)

Students are expected to attend class and participate in small and large group discussions and hand in written work as assigned. Additionally, part of this grade is for leading a reading discussion. Students, in small groups, will devise an active, student-centered learning plan to engage class members in a discussion of the reading materials. You will meet with Erin two weeks before your chapter is scheduled to generate ideas for your reading discussion. Your date for this will be determined at the start of our course. Each learner is also expected to participate in our Blackboard discussions and activities.

4. Reading Journal (10% of grade)

Each learner will be expected to keep an **electronic journal** on readings throughout the term. This will be turned in at the end of the semester **electronically**. Your journal will be unique but should include important points in the readings, your questions and reflections. **(DUE: July 14)**

C. Criteria for evaluation

All graduate students are expected to turn in their assignments on time, participate in face to face and online discussions, and maintain high writing standards. All assignments must be word-processed and will be returned to the student if more than five grammatical, APA, or spelling errors are found. Additionally, a rubric is provided for each major assessment requirement.

D. Grading Scale

A = 94-100

A- = 90-93

B+ = 87-89

B = 80-86

C = 70-79

F = below 70.

COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT STATEMENT OF EXPECTATIONS:

All students must abide by the following:

- Students are expected to exhibit professional behavior and dispositions. See <http://gse.gmu.edu/facultystaffres/profdisp.htm> for a listing of these dispositions.
- Students must follow the guidelines of the University Honor Code. See <http://academicintegrity.gmu.edu/honorcode/> for the full honor code.

Please note that:

- o “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>)
- o Paraphrasing involves taking someone else's ideas and putting them in your own words. When you paraphrase, you need to cite the source.
- o 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.

- o Electronic tools (e.g., SafeAssign) may be used to detect plagiarism if necessary.
 - o Plagiarism and other forms of academic misconduct are treated seriously and may result in disciplinary actions.
- Students must agree to abide by the university policy for Responsible Use of Computing. See <http://www.gmu.edu/facstaff/policy/newpolicy/1301gen.html>. Click on responsible Use of Computing Policy at the bottom of the screen.
- Students with disabilities who seek accommodations in a course must be registered with the GMU Office of Disability Services (ODS) and inform the instructor, in writing, at the beginning of the semester. See <http://www2.gmu.edu/dpt/unilife/ods/> or call 703-993-2474 to access the ODS.

Session by Session Schedule

| Date | Readings & Activities | Due |
|----------------------|---|---|
| June 7 Monday | TOPIC: Introductions and Class Expectations | By June 9 orient yourself with the GMU Online Databases and find a research article using one of the database searches (like PsychINFO); send Erin a private email with your most burning question about your practice or education in general |
| June 9 Wednesday | TOPIC: Overview and Types of Research <ul style="list-style-type: none"> • Read chapters 1 & 2 in M&C; • Read Kennedy article • Some groups will meet with Erin to develop in-class activity | Be ready to respond to questions posted in Blackboard regarding Kennedy article |
| June 14 Monday | TOPIC: Finding a question and sources; Locating Research Discussion on educational research in general, types and sources <ul style="list-style-type: none"> • Read chapters 3 & 4 in M & C • Some groups will meet with Erin to develop in-class activity | Find a media source (secondary research source) such as TV, newspaper, webarticle and bring in summary and comments regarding the findings and the way it is reported compared to a research article - be sure to cite your source. Be prepared to talk about your article. |
| June 16 Wednesday | TOPIC: Interpreting Research & Designing a Research Project <ul style="list-style-type: none"> • Read chapters 5 & 6 in M & C • Read chapters 1 & 2 in Galvan and choice of literature review; • Student-led activity • Some groups will meet with Erin to develop in-class activity | Optional: Bring in your research article for feedback by Erin |
| June 21 Monday | TOPIC: So, how do we conduct a study and what do I do with my data? <ul style="list-style-type: none"> • Read chapters 7 & 8 in M & C • Read chapters 3 & 4 in Galvan • Student-led activity • Some groups will meet with Erin to develop in-class activity | Critique of selected research article |

| | | |
|---------------------------------|--|--|
| June 23 Wednesday | TOPIC: What's in a report?; Qualitative methods <ul style="list-style-type: none"> • Read chapters 5 & 6 in Galvan • Read chapters 9 & 10 in M & C • Student-led activity • Some groups will meet with Erin to develop in-class activity | Reflection of literature review from Galvin's book (see above) |
| June 28 Monday | TOPIC: Studies you might try: Survey, Correlational, Causal-Comparative <ul style="list-style-type: none"> • Read chapters 11& 12 in M&C • Student-led activity • Some groups will meet with Erin to develop in-class activity | Submit Part I of research project (reflection on practice and question you will study) electronically to Erin (epeters1@gmu.edu) |
| June 30 Wednesday | TOPIC: More techniques: Experimental, Mixed-methods, Action research <ul style="list-style-type: none"> • Read chapters 13, 14 & 15 in M & C • Student-led activity • Some groups will meet with Erin to develop in-class activity | Come to class with three questions about the process, reading, and perspectives of research throughout the semester. |
| July 5 – no class – GMU Holiday | | |
| July 7 Wednesday | TOPIC: Statistics; Review what we have learned all semester <ul style="list-style-type: none"> • Read Appendix A in M & C • Read chapter 8 in Galvan • Student-led activity | |
| July 12 Monday | TOPIC: What don't we know yet? Questions for the group <ul style="list-style-type: none"> • Read chapter 9 in Galvan • Student-led activity | Submit Part II of research project (what is known in the research and literature base) electronically to Erin (epeters1@gmu.edu) |
| July 14 Wednesday | TOPIC: Wrap up of significant topics, review of questions and future directions | Reading journal |
| July 19 Monday | <ul style="list-style-type: none"> • Oral presentations of proposal • Class consultation | |
| July 21 Wednesday | <ul style="list-style-type: none"> • Oral presentations of proposal • Class consultation | |
| July 26 Monday | <ul style="list-style-type: none"> • Oral presentations of proposal • Class consultation • Pot luck ?? | Final Project "research proposal" is due electronically or paper by July 28 by 7pm |
| July 28 | <ul style="list-style-type: none"> • Turn in final project by 7 pm | |

EDRS 590
Assignment rubric: Article Critiques

Name: _____

| Criteria | No Evidence 0 | Beginning (Limited evidence) 1 | Developing (Clear evidence) 1.5 | Accomplished (Clear, convincing, substantial evidence) 2 | SCORE |
|---|-------------------------|---|--|---|--------------|
| Article Selection Is the article a primary source? | | | | | |
| Description of problem & methods 1. What was the purpose of the study? 2. What was (were) the research question(s)? 3. What were the topics of the literature review? 4. What type of research was conducted? 5. What type of sampling was used? 6. How were the data collected? Refer to the quantitative/qualitative specifics listed in the Guide for Analyzing Research Articles. | | | | | |
| Analysis of article 1. How were the validity and reliability of the data assessed? 2. What descriptive and/or inferential analyses were used? 3. What conclusions did the researchers report? 4. Were the conclusions convincing? Why or why not? | | | | | |
| Implications for your research | | | | | |
| Quality of your writing | | | | | |

Comments:

COURSE EDRS 590
Assignment rubric: Literature Review Reflection

| Criteria | No Evidence 0 | Beginning (Limited evidence) 1 | Developing (Clear evidence) 1.5 | Accomplished (Clear, convincing, substantial evidence) 2 | SCORE |
|---|------------------|--------------------------------------|---------------------------------------|--|-------|
| <p style="text-align: center;">Analysis of review</p> <ol style="list-style-type: none"> 1. Have the reviewers clearly identified the topic of the review? 2. Is it a topic that is of interest to the educational community? 3. Have they explained the rationale behind the article? <ol style="list-style-type: none"> a. For example have they stated why they chose certain time period or portion of the topic? 4. Have the reviewers written a cohesive essay that makes an argument from subtopic to subtopic? 5. Do the reviewers include a summary of the contents of the literature review at or near the beginning? 6. Do the authors use subheadings? | | | | | |
| <p style="text-align: center;">Description of strengths/ weaknesses</p> <ol style="list-style-type: none"> 1. What are the strengths and weaknesses of the article? 2. Have the reviewers interpreted and critiqued the literature OR have they merely listed results of research? | | | | | |
| <p style="text-align: center;">Reflections on process</p> <ol style="list-style-type: none"> 1. Do you think the reviewers make an important contribution to knowledge through their synthesis of the literate? | | | | | |
| <p style="text-align: center;">Implications for your research</p> <ol style="list-style-type: none"> 1. How is this review going to help you in your literature review? | | | | | |
| Quality of your writing | | | | | |

Comments:

COURSE EDRS 590
Assignment rubric: Final Project

Name: _____

Date: _____

| CRITERIA | No Evidence 0 | Beginning (Limited evidence) 1-2 | Developing (Clear evidence) 3-4 | Accomplished (Clear, convincing, substantial evidence) 5-6 | SCORE |
|--|------------------|--|---------------------------------------|--|-------|
| Introduction | | | | | |
| Describes the problem | | | | | |
| Clear research question stated | | | | | |
| Significance of problem is addressed | | | | | |
| Extent & Analysis of literature | | | | | |
| Multiple levels of headings are used to organize related studies | | | | | |
| Balanced perspective is presented, offering more than one view | | | | | |
| Research Design | | | | | |
| Clear research questions or hypothesis | | | | | |
| Design of study matches goals | | | | | |
| Tools suggested | | | | | |
| Population identified | | | | | |
| Limitations Identified | | | | | |
| Analysis Plan Described | | | | | |
| References | | | | | |
| Full citations for all sources mentioned | | | | | |
| Use of APA style for formatting | | | | | |
| All listed references are used in the paper | | | | | |
| References are from scholarly sources | | | | | |
| Overall Style | | | | | |
| Clear, concise writing | | | | | |
| Grammar and punctuation | | | | | |
| Multiple levels of headings used to organize ideas | | | | | |

Comments: