

**George Mason University  
Graduate School of Education**

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**EDRS 810-003 (3 credits)**

***Problems and Methods in Educational Research***

**Spring 2013**

**Wednesdays, 4:30-7:20, Innovation Hall 333**

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Hours: by appointment

**COURSE DESCRIPTION**

This is an advanced course in the interpretation and application of education research methods. Emphasizes comparison of alternative philosophies of research, ways of formulating questions/hypotheses, research plans, and analysis procedures. Students evaluate existing studies and investigate a range of research approaches.

*Prerequisites: Admission to the Ph.D. program or permission of instructor.*

**COURSE OBJECTIVES**

Upon successful completion of the course, students should:

- be able to understand what research is, and how it differs from other intellectual and practical activities in education;
- be able to understand the major approaches to educational research, and the implications of the differences between these for doing and evaluating research in education;
- be able to find, understand, evaluate, and apply published research that is relevant to their field;
- be able to design the basic components of small-scale research studies, both quantitative and qualitative, including
  - identifying a research problem to study
  - formulating the purposes of the study
  - developing a conceptual framework for the study
  - generating appropriate research questions
  - planning relevant and feasible methods of sampling, data collection, and analysis
  - anticipating plausible validity threats, and thinking of ways to deal with these
  - dealing appropriately with ethical issues in the research

- be able to write clearly and coherently about the conceptual framework, questions, and methods used in a research study;
- be able to use the writing style described in the 6<sup>th</sup> edition of the *Publication Manual of the American Psychological Association* (APA) for writing term and research papers;
- be able to reflect on research results and how they might inform educational practice and policy;
- be able to present research clearly and coherently both in writing and speaking.

## COURSE REQUIREMENTS

\*The following course requirements will be explained in detail during class meetings.

### 1. Mandatory Training for Persons Conducting Research Using Human Subjects

Students will be asked to complete Mandatory Training for Persons Conducting Research Using Human Subjects. Information is available online:

<http://research.gmu.edu/ORIA/HumanTraining.html> (Office of Research Integrity & Assurance). The training takes between two and three hours and can be accessed from: <http://www.citiprogram.org>. A copy of your completion certificate must be submitted to the professor for credit to be awarded.

### 2. Completion of Human Subjects Proposals

Students will write a human subjects proposal to accompany a quantitative or a qualitative research method section. The materials are available on the web site:

<http://research.gmu.edu/ORIA/InstitutionalReview.html>

### 3. Method Section

Students will write a more complete method section based on the HSRB proposal. The method section will contain information relevant to the specific type of research design (quantitative or qualitative).

1. Statement of purpose and research questions, including discussion of 2-3 important and relevant research studies (2-3 pages)
2. Method (5-6 pages)
  - Research design
  - Participants and setting
  - Materials
  - Data sources
  - Procedures (proposed data collection process)
  - Proposed preliminary data analyses
3. References (1 page)

#### **4. Shifting Research Genre Presentation**

Students will use their methods section, whether quantitative or qualitative, and propose ways of investigating the phenomenon using an alternative research genre. Thus, if a study uses quantitative methods, a proposal would be made for using qualitative methods; and vice-versa. In the presentations students will describe how research questions might change, a new methodology, including subjects, data gathering techniques, data sources, and data analyses. Students will also explore the question of how new insights might be gleaned from this alternative approach.

Students will make a short power point presentation to the class over the research genre shift. The slides will be submitted to the professor and handouts from the slides will be distributed in class. These presentations will occur during the final class sessions.

#### **5. Chapter Self-Assessments**

Students will be responsible for completing the *multiple-choice* self-assessments over all *required* chapters in Creswell. These will be taken online and a satisfactory score (90% correct or better) will be submitted to the professor using the emailing forwarding function at the end of each scored assessment.

[wps.prenhall.com/chet\\_creswell\\_educational\\_3/](http://wps.prenhall.com/chet_creswell_educational_3/)

**\*Bring flash or other relevant media to class in order to save work completed during class.**

**\*All assignments will be submitted electronically. Redrafted assignments must include tracked changes.**

## EVALUATION

Human Subjects online training completion	5 pts
Human Subjects Proposal	25 pts
Method Section	40 pts
Shifting Research Genre Presentation	20pts
Chapter Self-Assessments	10 pts
<b>TOTAL</b>	<b>100 pts</b>

Final grades are calculated as a percent of total points earned:

A	= 93% - 100%	93 -100 pts
A-	= 90% - 92%	90 – 92 pts
B+	= 87% - 89%	87 – 89 pts
B	= 80% - 86%	80 – 86 pts
C	= 79% and lower	79 – fewer pts

## REQUIRED TEXTBOOK

Creswell, J.W. (2008). *Educational Research: Planning, conducting, and evaluating quantitative and qualitative research* (3<sup>rd</sup> ed.). Upper Saddle River, NJ: Pearson Education.

This text has a Companion Website that will be employed for chapter self-assessments:  
<http://www.prenhall.com/creswell>

## Recommended Text

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

## **GMU POLICIES AND RESOURCES FOR STUDENTS**

- a. Students must adhere to the guidelines of the George Mason University Honor Code [See <http://oai.gmu.edu/honorcode/>].
- b. Students must follow the university policy for Responsible Use of Computing [See <http://universitypolicy.gmu.edu/1301gen.html>].
- c. 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.
- d. 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/>].
- e. 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/>].
- f. Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.
- g. 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/>].

## **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/>

**Tentative Agenda**

DATE	TOPIC	ASSIGNED READING DUE	CLASS ACTIVITIES
1. 1/23	EDRS 810 in context of the GMU doctoral program experience		<b>Guest presenter: Melissa Mayville, doctoral student in Educational Policy</b>
2. 1/30	Review syllabus- Introduction to the Field of Educational Research  Mandatory Training for Persons Conducting Research Using Human Subjects  Introduction to GMU Policy for Human Subjects	Chapters 1, 2	<a href="http://www.citiprogram.org">http://www.citiprogram.org</a>  <a href="http://research.gmu.edu/ORIA/InstitutionalReview.html">http://research.gmu.edu/ORIA/InstitutionalReview.html</a>
3. 2/6	<b>TBA</b>		
4. 2/13	Identifying Research Problems; Reviewing the Literature Specifying a Purpose; Quantitative Research Questions  Writing a successful HSRB proposal	Chapters 3, 4, 5	Lecture/discussion  <b>Mandatory Training for Persons Conducting Research Using Human Subjects must be completed and certification document submitted</b>
5. 2/20	Identifying Research Problems; Reviewing the Literature Specifying a Purpose; Qualitative Research Questions  Writing a successful HSRB proposal	Chapters 3, 4, 5	Lecture/discussion
6. 2/27	Individual Consultation on HSRB proposal		Individual Conferencing

Brozo EDRS810 syllabus

<b>7. 3/6</b>	Individual Consultation on HSRB proposal		Individual Conferencing <b>Human Subjects Proposal due for those who conferenced on 2/27</b>
<b>8. 3/13</b>	<b>Spring Break</b>		<b>Human Subjects Proposal due for those who conferenced on 3/6</b>
<b>9. 3/20</b>	Collecting, Analyzing and Interpreting Quantitative Data	Chapters 6, 7, 11	Lecture/discussion
<b>10. 3/27</b>	Collecting, Analyzing and Interpreting Qualitative Data	Chapters 8, 9	Lecture/discussion
<b>11. 4/3</b>	Individual Consultation on Methods Section		Individual Conferencing
<b>12. 4/10</b>	Individual Consultation on Methods Section		Individual Conferencing
<b>13. 4/17</b>	<b>TBA</b>		<b>Method Section Due</b>
<b>14. 4/24</b>	Mixed Methods Research  Shifting Research Genre Presentations	Chapter 17	Lecture/discussion
<b>15. 5/1</b>	Shifting Research Genres Presentations		<b>Class Presentations of Shifting Research Genre</b>
<b>16. 5/8</b>	Shifting Research Genres Presentations		<b>Class Presentations of Shifting Research Genre</b>
<b>17. 5/15</b>	Final Class Session		<b>TBA</b>

