George Mason University
College of Education and Human Development
Education Research EDRS 590, Sec 001: 3 credits

Meeting Day/time: T 4:30-7:10 p.m.

Location: Robinson A350

Professor:
  Office Hours: 4:30-5:30 M, T 2:30—3:30, and by appointment (contact by email preferred)
Office Location: Commerce II Room 113B. Office Phone: 703-993-9713.
Phone: (703) 993 9713 [email preferred]
   Email: akelly1@gmu.edu

Course Description:

EDRS 590. Develops skills, insights, and understanding to perform research, with emphasis on interpreting and applying research results. Critique research, and use findings in educational settings. This is an introductory course in the fundamental concepts, principles and methods of educational research. It is a survey course that serves as a foundation for practitioners who have little of no experience in educational research. Students who plan to participate in extensive applied and action educational research are strongly encouraged also to take a course in quantitative and qualitative analysis. EDRS 590 is prerequisite for more advanced research courses in the Education Psychology Master of Science degree.

Objectives: As a result of this course, the students will:

◉ become literate in the basic concepts, principles, and techniques of educational research
◉ acquire basic skills in the analysis and interpretation of research data
◉ appreciate the underlying cognitive processes involved in conducting educational research as a form of thinking and problem solving
◉ acquire the skills associated with the critical reading and evaluation of the educational research literature
◉ engage in collaborative action research

Description

Successful attainment of course goals requires the mastery of many competencies. Four significant areas will be assessed through various evaluation methods:

1. *Comprehension.* Students can demonstrate comprehension of the basic concepts related to the methods and analysis of educational research.

2. *Application.* Students can apply appropriate techniques of analysis to specific research problems.
3. *Literacy.* Given a research report, the students are able to classify, interpret, and evaluate educational research reports according to the concepts and principles studied in the course.
4. *Professional Connections.* Students can relate and apply the principles and techniques of educational research to their areas of professional studies.

Educational Psychology Program Standards

Across the many course in the Educational Psychology, 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 methodology to critically read and evaluate quantitative and qualitative research articles.**

5. **Candidates will use their knowledge of quantitative and qualitative research methodology to develop a research proposal and conduct research.**

6. Candidates will demonstrated critical thinking, oral presentation, technological, and writing skills as they are used in the profession. These include:

    a. **Knowledge and use of APA style**
    b. **Oral presentations**
    c. Poster presentations
    d. **Article abstracts**
    e. **Research proposals**
    f. **Literature reviews**
    g. **Technological skills (including library/reference skills, interactive displays skills, data analysis skills)**

Readings:

Maxwell, J. (2005). Qualitative research design. Thousand Oaks, CA: Sage. (required)
McMillan, J. H., & Schumacher, S. (2006). Research in education. New York:
Pearson. (Required) [M & S in the syllabus]
Tjeerd Plomp & Nienke Nieveen (2008). Introduction to Educational Design Research
[free download at:
http://www.slo.nl/downloads/2009/Introduction_20to_20education_20design_20research.
pdf/download]

Course Requirements:

- Students will attend all classes, and participate in discussions. If you must be absent, please inform the instructor via email.
- Students will read assigned readings **before** each class and will be prepared to discuss the material). The progress through the various chapters will reflect the preparation of the students for the material.
- Students will conduct in-class research as directed by the professor;
- Students will demonstrate archival and critical research skills by locating six or more research papers on an educational research topic of their choice.
- Students will complete in-class assignments linked to the syllabus topics.
- Writing should follow APA style. Many websites summarize the format. The site from Purdue University is available here: http://owl.english.purdue.edu/owl/resource/560/01/.

Grading:

Research skill portfolio: 70 points. Over the semester, students will complete assignments before and during class time. Students' responses to questions will be collected in a portfolio, which will be graded, and which is due the last day of class.
Literature review: 30 points. Identify a topic of interest. Locate three qualitative and three quantitative articles on this topic. Introduce the topic, generally, e.g., what is known, not known? Describe the research strengths and weaknesses of each of the studies using skills taught in the class. Synthesize the findings from the six studies into a coherent statement about your topic (to the extent that the studies allow such a synthetic statement). 20 pages, double-spaced. Due May 6.
Please let the instructor know via email if you will miss a class or will be unavoidably late with an assignment.

Class participation: 10 points.

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%		

COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT

Student Expectations

- Students must adhere to the guidelines of the George Mason University Honor Code [See http://academicintegrity.gmu.edu/honorcode/].

- 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/].

- Students must follow the university policy for Responsible Use of Computing [See http://universitypolicy.gmu.edu/1301gen.html].

- 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.

- Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.

- Students are expected to exhibit professional behaviors and dispositions at all times.

Campus Resources

- 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/].

- 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/].

GSE faculty may add at the conclusion:
- For additional information on the College of Education and Human Development, Graduate School of Education, please visit our website [See http://gse.gmu.edu/].

ASSESSMENT RUBRIC FOR LITERATURE REVIEW

Criteria	Excellent	Adequate	Needs Significant Changes
Peer-Reviewed Research	Contains references to 6 studies (6)	Contains references to fewer studies (1-5)	Contains references to fewer studies (1-5)
APA Style	No significant errors (3)	Contains few significant errors in style, reader can still interpret and appreciate the content of the paper (2)	Paper does not adhere to APA-Style format (1)
Abstract	Conveys clearly and sequentially the content of paper (3)	Gives a general overview of paper topic, but no sequential elaboration of contents (2)	Key information is not included in the summary, or abstract does not provide a clear representation of paper contents (1)
Discussion of the Literature	Insightful, and critical; clearly written, technical terms are well-defined, does not overly rely on quotes from papers or includes them strategically (5)	Clearly written, most technical terms, author includes lengthy quotes from papers, but less analytical or insightful (4)	Over reliance on quotations, little evidence of student's own analysis or synthesis of the topic (1-3)
Writing	Paper flows coherently, language is concise, thesis and discussion are well-structured, purpose of the paper is evident (4)	Paper adequately conveys the main points of the topic (3)	Errors in style format make it difficult to appreciate the content of this paper (1-2)
Technical Merit	Complete references to features such as hypothesis, sample, method, analysis, etc. (5)	Comments on most features of the reviewed research (3)	Ignores major aspects of the studies reviewed (1-2)

	Insightful, original synthesis, goes beyond the scope of the literature (4)	Analytical, draws logical conclusions based upon evidence from literature, but adds little new (3)	Discussion mostly summarizes the main points of the literature to support conclusions (1-2)
Interpretations			

ASSESSMENT RUBRIC FOR PARTICIPATION AND ATTENDANCE

	LEVEL OF PERFORMANCE			
ELEMENT	Distinguished (9-10 pts.)	Proficient (8 pts.)	Basic (7 pts.)	Unsatisfactory (6 or less pts.)
Attendance & Participation 10 pts. Possible	The student attends all classes, is on time, is prepared and follows outlined procedures in case of absence, the student actively participates and supports the members of the learning group and the members of the class.	The student attends all classes, is on time, is prepared and follows outlined procedures in case of absence; the student makes active contributions to the learning group and class.	The student is on time, prepared for class, and participates in group and class discussions. The student attends all classes and if an absence occurs, the procedure outlined in this section of the syllabus is followed.	The student is late for class. Absences are not documented by following the procedures outlined in this section of the syllabus. The student is not prepared for class and does not actively participate in discussions.

Class activities

Date	Activity	Comments
1/25 Wk 1	Introduction to Course Expectations and	The researcher's orientation The importance of task design

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	Framework Fundamental Principles of Educational Research Discuss M & S Chapter 1 Lu'courpan	Locating research library/NSF Download, read and bring to next class an article in the Educational Researcher journal by Kelly and Yin (2007). Review: pp. 31-44.
2/1 Wk 2	Fundamental Principles of Educational Research Discuss M & S Chapters 1-5	Assignments
2/8 Wk 3	Quantitative Research Designs and Methods Discuss M & S Chapters 6-11	Assignments
2/15 Wk 4	Quantitative Research Designs and Methods Discuss M & S Chapters 6-11	Assignments
2/22 Wk 5	Quantitative Research Designs and Methods Discuss M & S Chapters 6-11	Assignments
3/1 Wk 6	Qualitative Research Designs and Methods Discuss M & S Chapters 12-14	Assignments
3/8 Wk 7	Qualitative Research Designs and Methods Discuss M & S Chapters 12-14	Maxwell Chapter 3 Assignments
3/15 Wk 8	Emerging Methods of Research M & S Chapter 15	Assignments Maxwell Chapters 4-6
3/22 Wk 9	Emerging Methods of Research M & S Chapter 15	Assignments
3/29 Wk 10	Analytical Research M & S Chapter 16	Assignments
4/5 Wk 11	Design research See Plomp and Nieveen	Assignments
4/12 Wk 12	AERA, No face to face class; online assignments	Assignments

4/19 Wk 13	Spring Break	
4/26 Wk 14	Evaluation and Policy Research M & S Chapter 17	http://research.gmu.edu/docs/RCR.pdf Ethical training (due next week) Assignments
5/3 Wk 15	Writing Research Proposals Portfolio due in class	Literature Review Paper Due electronically **May 6** Subject: "Your Last Name EDRS 590 Literature Review Spring 2011" Send email confirmation of ethical training/certificate

ACADEMIC INTEGRITY
Mason is an Honor Code university; please see the University Catalog for a full description of the code and the honor committee process. The principle of academic integrity is taken very seriously and violations are treated gravely. What does academic integrity mean in this course? Essentially this: when you are responsible for a task, you will perform that task. When you rely on someone else's work in an aspect of the performance of that task, you will give full credit in the proper, accepted form. Another aspect of academic integrity is the free play of ideas. Vigorous discussion and debate are encouraged in this course, with the firm expectation that all aspects of the class will be conducted with civility and respect for differing ideas, perspectives, and traditions. When in doubt (of any kind) please ask for guidance and clarification.

MASON EMAIL ACCOUNTS Students must use their MasonLIVE email account to receive important University information, including messages related to this class. See http://masonlive.gmu.edu for more information.

OFFICE OF DISABILITY SERVICES If you are a student with a disability and you need academic accommodations, please see me and contact the Office of Disability Services (ODS) at 993-2474. All academic accommodations must be arranged through the ODS. http://ods.gmu.edu

OTHER USEFUL CAMPUS RESOURCES:
WRITING CENTER: A114 Robinson Hall; (703) 993-1200; http://writingcenter.gmu.edu
UNIVERSITY LIBRARIES "Ask a Librarian" http://library.gmu.edu/mudge/IM/IMRef.html
COUNSELING AND PSYCHOLOGICAL SERVICES (CAPS): (703) 993-2380;
http://caps.gmu.edu

UNIVERSITY POLICIES The University Catalog, http://catalog.gmu.edu, is the central resource for university policies affecting student, faculty, and staff conduct in university academic affairs. Other policies are available at http://universitypolicy.gmu.edu/. All members of the university community are responsible for knowing and following established policies.

Statement of Expectations
The College of Education and Human Development expects that all students abide by the following:
- Commitment to the profession
- Commitment to honoring professional ethical standards
- Commitment to key elements of professional practice

- Commitment to being a member of a learning community
- Commitment to democratic values and social justice

See for details of these 5 expectations: http://gse.gmu.edu/facultystaffres/profdisp.htm