

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

Meeting Day/time: Th 7:20-10:00 p.m.

Location: Innovation Hall 320

Professor:

Office Hours: 5-7:00pm M and TH, and by appointment (contact by email preferred)

Phone: (703) 993 9713

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. (2010). *Research in education* (7th Ed). 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 submit a 12 page paper (double-spaced; not including references) reviewing the literature in this area of interest and commenting on the research methods used in the studies.
- The paper should follow APA style, as outlined in the *Publication Manual of the American Psychological Association* (2001, 5th edition)—available from the American Psychological Association, Order Department, P.O. Box 2710, Hyattsville, MD 20784. Many websites summarize the format. The site from Purdue University is available here:
<http://owl.english.purdue.edu/owl/resource/560/01/>.

Grading:

Assessments: 3 quizzes * 10 points, each = 30 %

Critical literature review: 40 %. Identify a topic of interest; **discuss topic choice with instructor before proceeding**. Locate three qualitative and three quantitative articles on this topic. Use the course textbooks, lectures, class discussions, and research evaluation handout to critique the studies. 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). Please let the instructor know via email if you will miss a class or will be unavoidably late with an assignment.

Class presentation: Each student is required to create a 10 minute summary of their literature review, and present it to the class: 20 %. See:

<http://www.aera.net/Default.aspx?id=299>; <http://www.meetingtomorrow.com/cms-category/presentation-tips-and-tricks> <http://www.docstoc.com/docs/2569170/How-to->

give-effective-professional-and-academic-presentations for directions on effective presentations.

Class participation: 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%		

ASSESSMENT RUBRIC FOR LITERATURE REVIEW

Criteria	Excellent	Adequate	Needs Significant Changes
Peer-Reviewed Research	Contains references to 7 or more empirical studies (5)	Contains references to 6 studies (4)	Does not include at least 6 peer reviewed studies (3)
APA Style	No significant errors (5)	Contains few significant errors in style, reader can still interpret and appreciate the content of the paper (4)	Paper does not adhere to APA-Style format (3)
Length	Paper adheres to 12 page limit (5)	Paper length is 1 page below the ascribed limit (4)	Paper is 2 or more pages short (3)
Abstract	Conveys clearly and sequentially the content of paper (5)	Gives a general overview of paper topic, but no sequential elaboration of contents (4)	Key information is not included in the summary, or abstract does not provide a clear representation of paper contents (3)
Discussion of the Literature	Clearly written, all topic-specific jargon are well-defined, author does not rely on quotes from papers or includes them strategically (5)	Clearly written, all topic-specific jargon are defined, author includes quotes from papers, but quotes are lengthy (4)	Too much reliance on quotes taken directly from the literature so that it interrupts the flow of the content and leaves out room for student's own synthesis of the topic (3)
Writing	Paper flows coherently, language is	Paper conveys the main points of the topic (4)	Errors in style format make it difficult to appreciate the content

	concise, thesis and discussion are well-structured, purpose of the paper is evident (5)		of this paper (3)
Technical Merit	Contains NO major misspellings or repetitive grammatical mistakes (5)	Contains few major misspellings or repetitive grammatical mistakes (4)	Contains major misspellings and repetitive grammatical mistakes (3)
Interpretations	Insightful, original synthesis, goes beyond the scope of the literature (5)	Analytical, draws logical conclusions based upon evidence from literature (4)	Discussion does not summarize well the main points of the thesis or provide evidence from peer reviewed studies to support conclusions (3)

ASSESSMENT RUBRIC FOR PRESENTATION

Criteria	Excellent	Satisfactory	Inadequate
Time	Clearly addresses content within time limit (5)	Ends within time limit, but presentation not fully finished (3-4)	Overly short or overly long (time limit not adequately considered) (0-2)
Content	Central points of the literature review are covered coherently (5)	Most points covered, but sampling from the literature review is not comprehensive (3-4)	Poorly selected points or failure to address quantitative and qualitative papers (0-2)
Organization	Clear and coherent, easy to follow (5)	Reasonably well organized, but order does work well in the time limit (3-4)	Disorganized, confusing to the audience and instructor (0-2)
Oral presentation	Articulate, professional, engaging (5)	Professional presentation, but delivery detracts from its impact (3-4)	Poor communication skills that detract significantly from the presentation (0-2)

ASSESSMENT RUBRIC FOR PARTICIPATION AND ATTENDANCE

ELEMENT	LEVEL OF PERFORMANCE			
	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.

Course Schedule

Date	Activity	Comments
1/21	Introduction to Course Expectations and Framework Fundamental Principles of Educational Research Discuss M & S Chapter 1 Lu'courpan	The researcher's orientation The importance of task design Download, read and bring to class an article in the Educational Researcher journal by Kelly and Yin (2007). Review: pp. 31-44. Download your choice of quantitative and qualitative articles and review in similar manner Bring to class
1/28	Reviewing Literature Locating research library/NSF other sources Research designs and reading research articles	Discuss M&S Chapter 4 Discuss M & S Chapter 2 Discuss M & S Chapter 3
2/4	Quantitative Research Designs and Methods Discuss M & S Chapters 5-12	Articles assigned for review
2/11	Quantitative Research Designs and Methods Discuss M & S Chapters 5-12 Online Class Meeting	Ethical training http://research.gmu.edu/docs/RCR.pdf Articles assigned for review Character of Education and Evidence- based Research Quiz assigned
2/18	Quantitative Research Designs and Methods Discuss M & S Chapters 5-12	Articles assigned for review Character of Education and Evidence- based Research Quiz due
2/25	Qualitative Research Designs and Methods Discuss M & S Chapters 13-15	Quantitative Methods Quiz assigned Maxwell Chapter 3 Articles assigned for review
3/4	Qualitative Research Designs and Methods Discuss M & S Chapters 13-15	Maxwell Chapters 4-6 Articles assigned for review
3/11		
SPRING BREAK		
3/18	Mixed Methods	Qualitative Methods Quiz assigned

	Discuss M & S Chapter 13-16	Articles assigned for review
3/25	Other Methods of Research M & S Chapter 19 Action Research Plomp and Nieveen	Quantitative Methods Quiz DUE Design research Articles assigned for review
4/1	Evaluation Research and Policy Analysis M & S Chapter 18	Articles assigned for review
4/8	Concept analysis and historical research M & S Chapter 17	Qualitative Methods Quiz DUE Articles assigned for review
4/15	Writing Research Reports M & S Appendix C	Summary presentations of literature review papers
4/22	Writing Research Proposals M & S Appendix B	Summary presentations of literature review papers
4/29	Course Synthesis Activity: Summary presentations of literature review papers	Literature Review Paper Due electronically Subject: "EDRS 590 Literature Review Spring 2010"

ACADEMIC INTEGRITY

GMU 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.

GMU EMAIL ACCOUNTS

Students must activate their GMU email accounts to receive important University information, including messages related to this class.

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 affairs.

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://www.gmu.edu/catalog/apolicies/#Anchor12> for the full honor code.

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 Disability Resource Center (DRC) and inform the instructor, in writing, at the beginning of the semester. See <http://www.gmu.edu/student/drc/> or call 703-993-2474 to access the DRC.