

EDRS 590

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

**EDRS 590
EDUCATION RESEARCH
FALL 2004
TUESDAYS 7:20 -10:00
INNOVATION 317
THURSDAYS 7:20-10:00
INNOVATION 131**

PROFESSOR(S):

Name: Dr. Carol G. Raphael

Email address: craphael@gmu.edu

Work phone: voice mail only 703-488-6363 Ext 7177

COURSE DESCRIPTION:

Helps students develop skills, insights, and understanding basic to performing research, with emphasis on interpretation and application of research results. The course critiques research and uses findings in educational settings.

NATURE OF COURSE DELIVERY:

Lecture, cooperative groups, use of Internet, student discussion

STUDENT OUTCOMES:

This course is designed to enable students to:

- Acquire a knowledge and understanding of the basic types of educational research and how each type is used in educational decision-making.
- Develop the skills necessary to use educational research in his/her role as a teacher, administrator, or other education professional.
- Practice the knowledge and skills learned by interpreting and designing educational research studies.

REQUIRED TEXTS:

Bonfadini, J.E. (1997). Educational research tutorial CDROM

Gay, L.R. and Airasian, P. (2003). Educational Research. Competencies for Analysis and Application (7thed.). New Jersey: Merrill Publishing Co.

Suggested reference:

American Psychological Association. (2001). Publications Manual of the American Psychological Association (5th ed). Washington, D.C.: Author.

COURSE REQUIREMENTS, PERFORMANCE-BASED ASSESSMENT, AND EVALUATION CRITERIA:

1. Research Plan (50 % of the grade)

The student will develop a research plan on a topic of interest to the student. Each student will work individually to develop a series of research questions of interest and will plan a research study to investigate one of those questions. To help the student develop the skills necessary, a series of short reports will be submitted for feedback as the semester progresses.

These reports will cover the following topics:

Report #1: Asking worthwhile questions about your professional practice.

Report #2: Finding out what's already known about your topic of interest.

Report #3: Planning the appropriate methods and procedures for investigating your topic of interest in your own professional practice.

The initial versions of each report will count as 5% of the final grade (total 15%) and the final version of the action research plan will count as 35% of the final grade (total =50%) for this series of assignments.

2. Critique of existing piece of research (25% of grade)

The student will select an existing piece of research, analyze the research using the skills developed in the course, and critique the research as to its potential use in educational decision-making.

3. Competency Exams and Class participation (15% of grade)

The CD Rom required for this course includes three competency tests. The tests are self-administered independently. Each test may be taken twice to reach a competency level of 90%. A printout of all tests should be turned into the instructor on the dates assigned in the syllabus. Students are expected to attend class and participate in small and large group discussions and hand in written work as assigned. Students absent from any class will be given a written assignment to be counted as part of their participation grade. Students absent from SPSS class presentations must make up the work in the computer lab on their own time or lose points from their class participation grade.

4. In class presentation of research proposal (10% of grade)

Students will prepare a PowerPoint or other visual presentation of their research proposal and will present that report to the class along with an abstract of their report for each class member.

GRADING

Successful completion of 1-4 above at a graduate-school level will guarantee the student a grade of at least a “B.” Superior work will merit an “A”. Less than successful completion of the requirements will result in a “C” or less. Less than successful completion of the requirements with any missing element will result in an “F”.

COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT STATEMENT OF EXPECTATIONS:

The Graduate School of Education (GSE) expects that all students abide by the following:

Students are expected to exhibit professional behavior and dispositions. See gse.gmu.edu for a listing of these dispositions.

Students must follow the guidelines of the University Honor Code. See http://www.gmu.edu/catalog/apolicies/#TOC_H12 for the full honor code.

Students must agree to abide by the university policy for Responsible Use of Computing. See <http://mail.gmu.edu> and click on Responsible Use of Computing 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 www.gmu.edu/student/drc or call 703-993-2474 to access the DRC.

ASSESSMENT RUBRIC(S)

Rubric for Proposal

The final proposal is worth 35 points. The points will be awarded as follows:

Body of paper with all parts and all references cited appropriately	20 points
No spelling errors or typos, cover sheet	5 points
References correct number and APA style	
Appropriate Research Techniques used	<u>10 points</u>
Total	35 points

RESEARCH ARTICLE CRITIQUE INSTRUCTIONS

As part of the course requirements in EDRS 590, you will submit a research article critique. The purpose of this critique is to give you practice in selecting, reading, and evaluating a research study.

You should select a research study that is related to your topic for your Research proposal. The research study should be one in which data is collected and analyzed and should come from a research journal. The research critique should include the following parts:

- 1) a short but complete description of the reviewed research
- 2) A brief critique of the study, describing its study, describing its weaknesses and strengths in research design, generalizability of conclusions, and any other considerations affecting the usefulness of this research.
- 3) a brief set of recommendations as to the worth of the study for use by you as an educator

In general, the report should:

- be complete in its coverage but also tightly organized and succinct
- be typed and approximately 4-8 pages in length, double spaced
- should not be a close paraphrase or a copy of any part of the original study, but should represent your interpretation and statement of the contents of the report
- should include a cover page
- should include a photocopy of the original article that you are critiquing as an appendix to your critique

The grading criteria are as follows:

- a) overall style and clarity - 20%
- b) completeness of summary - 30%
- c) completeness of quality of critique - 30%
- d) quality of recommendations of the use of the study - 20%

Reports 1, 2, 3 will be worth 5 points each. As long as all questions are answered completely, the student will receive all five points. Since the purpose of these reports is to provide feedback for the proposal, an honest attempt on the student's part to complete the assignments is encouraged.

EDRS 590 Fall 2004 Course Schedule Instructor: Dr. Carol G. Raphael Tuesday 7:20-10:00

Session	Date	Topic	Due	Assignment For Next Class
1	8/31	Course overview, overview of types of research approaches and methods, goals of action research; evaluating existing research in your field		Gay chapters 1 and 2 CDROM tutorial Research Elements p. 27 task 1a and 1b due to hand in
2	9/7	Asking worthwhile research questions for your professional practice; recognizing and selecting appropriate research methods; in-class exercise on asking a worthwhile action research question; Report #1 walkthrough	p. 27 task 1a and p.35 task 1b	Review class notes and Gay ch 3; select an action research topic to investigate in this course Report 1
3	9/14	Meet in Johnson Center Library Research Room on second floor. Finding existing information on your topic of interest; using ERIC and other library sources; a field trip to investigate the resources of the library; a brief introduction to the APA Style Manual	Report 1 due	Gay chapter 4 and 5 Competency test 1 due
4	9/21	Selecting a Sample and selecting Measurement Instruments In class practice on sample selection and instrumentation; Report 2 walkthrough		Gay chapters 6,7,8 Competency test 1 due
5	9/28	Characteristics of qualitative research; qualitative data collection and analysis Action research for the consumer Task 6 done in class in groups. Each group will submit a plan at the end of the class.	Competency test 1 Research Elements	Start CD Rom tutorial qualitative research Read and critique qual research article online Teachers in Bars Report 2 due
6	10/5	Evaluating existing research studies for use in educational practice Report 2 presentation in class: What research says about your topic.	Come prepared to discuss the research article Report 2 due	Gay ch 10 and 13. Due a photocopy of the article you plan to critique
7	10/19	Introduction to the characteristics and methods of causal comparative, quasi-	Your article for article	Read and critique quan research article

		experimental, and experimental research and survey research	critique	online Reducing Teacher Stress competency test 2 on qualitative research due
8	10/26	Planning your research:How to deal with internal and external validity problems research design principles A walkthrough of report 3	Qualitative research competency tests due Discussion of quan. research article	Due report 3 Gay ch 13, 14
9	11/2	Report 3 presentation in class Making inferences about the causes of the effects of basic descriptive statistics	Due report 3	Gay ch 15
10	11/9	Individual student conferences/TBA	Qualitative research competency tests due	
11	11/16	Describing the outcomes of your professional practice – using and understanding the methods of descriptive statistics		Gay ch 17 Research critique due Begin CD ROM Tutorial on Quan. Research
12	11/23	How to collect and process data in action research; preparing data for analysis; using the computer in data analysis; review of data analysis interpretation	Research article critique	Competency Test 3 due
13	11/30	Performing data analysis	Competency Test 3 on Quantitative Research Due	Oral presentation of research proposals
14	12/7	Presentation of research proposals		
15	12/14	<i>Final Research Proposal Due</i>		