

GEORGE MASON UNIVERSITY
COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT
GRADUATE SCHOOL OF EDUCATION

SYLLABUS

EDRS 810: Problems and Methods in Educational Research

Fall, 2004

Instructor: Tom Scruggs, Ph.D.

Meeting: 327 Innovation Hall, 7:20 - 10:00 pm

Office: Robinson Hall A, Room 353

Office Hours: M 2-4:00 PM

W 4-6:00 PM

Other hours may be arranged by appointment.

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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 Fifth Edition of the *Publication Manual of the American Psychological Association* (APA) for writing term and research papers;
- be able to reflect on their actions and choices and use that reflection to inform practice;
- be able to present written research results clearly and coherently.

GSE Syllabus Statements 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 <http://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.

Course Methodology

This course consists of lectures, large group and online formats, in class and individual or group activities, and individual assignments.

Required Text

Creswell, J.W. (2002). *Educational Research: Planning, conducting, and evaluating quantitative and qualitative research*. Upper Saddle River, NJ: Pearson Education.

This text has a Companion Website that will be employed in this class:
<http://www.prenhall.com/creswell>

Recommended Text

American Psychological Association. (2001). *Publication manual of the American Psychological Association* (5th ed.). Washington, DC: Author.

Course Requirements: It is expected that each of you will:

- (1) Read all assigned materials for the course.
- (2) Participate in classroom activities that reflect critical reading of materials.
- (3) Complete regular homework assignments.*
- (4) Take weekly online tests and submit results to professor.*
- (5) Complete midterm and final examinations.*
- (6) Write and submit research proposal.*
- (7) Attend each class session.

*Late assignments will not be accepted by the instructor. If an emergency occurs please notify the instructor in advance.

Course Requirements

1. Homework Assignments: Students will be asked to complete homework assignments throughout the semester and submit the following class meeting. These assignments are listed on the class schedule, although they may be amended during class.

2. Online weekly tests: Students are asked to complete and submit online tests on each week's assignment. (Be sure to complete all sections of weekly tests, possibly including multiple choice, true-false, and/or matching.)

3. Mid-term and final examinations: Students will be given written mid-term and final examinations, as identified on class schedule. Each of these will consist of a number of short answer questions (approximately 1-2 paragraphs).

4. Research Proposal: This course requires students to write a research proposal in the area of the student's choosing (10-15 pages, not including title page and references). It should employ APA format (see sample paper on pp 306-320 of the APA manual) and contain the following sections:

1. Introduction (2-3 pages)
 - General statement of problem
 - Background of the problem
 - Significance of the problem
 - Problem (specific)
 - Hypotheses/research questions
2. Literature review (previous research) (4-6 pages)
3. Method (4-6 pages)
 - Participants and setting
 - Research design
 - Data sources; dependent variables; instrumentation (where relevant)

Procedures (proposed data collection and analysis)
 Anticipated results (where relevant)
 Limitations
 Importance

References

5. Class Participation and Attendance Policy: Because of the importance of lecture and discussion to your total learning experience, I wish to encourage you to both attend and participate in class regularly. Attendance, punctuality, preparation, and active contribution to small and large group efforts are essential. These elements of your behavior will reflect the professional attitude implied in the course goals and will account for 10% of your course grade. With reference to the grading scale described later in this syllabus, you will note that this percentage is equivalent to a full letter grade. Students who must miss a class must notify the instructor (preferably in advance) and are responsible for completing all assignments and readings for the next class.

Course Evaluation

RUBRIC FOR HOMEWORK ASSIGNMENTS

Adequate assignment (1 point): Assignment is thorough, thoughtful, correctly done, and submitted on time.

Marginal assignment (.5 point): Assignment is carelessly prepared, not thoughtful, or incomplete.

Inadequate assignment (0 points): Assignment has little or no value, or is not submitted on time.

RUBRIC FOR WEEKLY TESTS

Adequate test (1 point): Submitted on time; reflects a score of 90% or greater.

Marginal test (.5 point): Lower score reflects lack of content knowledge.

Inadequate test (0 points): Very low score or not submitted on time.

RUBRIC FOR MID-TERM AND FINAL EXAMINATIONS

8 items for each examination, each requiring 1-2 paragraph response. Item scoring criteria:

Exemplary response (2.5 points): Provides direct and thorough response to question, defines

relevant terms, provides specific examples or instances of the concepts being discussed. Answer is directly reflective of lecture, readings, activities, or assignments, or other material of direct relevance to class.

Adequate response (2 points): Provides direct and relevant response to question, provides accurate information directly relevant to class readings, notes, or activities. May provide less information, less elaboration, or a less thoughtful overall response than an exemplary response:

Marginal response (1.5 points): Provides some relevant information, but does not demonstrate overall a clear or complete understanding of the relevant concepts:

Inadequate response (1 - .5 points): Weak response that does not appear to reflect course content or activities. May include inaccurate information:

No response (0 points): no response or response that is entirely inaccurate.

RUBRIC FOR PROPOSAL ASSIGNMENT

Exemplary paper (18-20 points): Appropriate topic, thorough and thoughtful review of previous research, appropriate and clearly described implementation procedures, careful measurement and evaluation of results, thorough and appropriate discussion of implications of findings. Good writing style, free of mechanical or stylistic errors, appropriate use of APA format.

Adequate paper (16-17 points): Good overall paper, lacking in one or two of the criteria for an exemplary paper. Not entirely reflective or thoughtful, or minor writing style or APA format errors may be present.

Marginal paper (14-15 points): Overall, acceptable but with one or more significant problems. Contains some useful information, but may have substantial problems with evaluation, writing style or APA format, or unclear or inappropriate description of implementation of project.

Inadequate paper (1-13 points): Paper with substantial problems in important areas such as writing, proposed implementation of intervention, procedures for evaluation of results, or overall thoughtfulness. Contains little or no information of value to field of education.

Unacceptable/no paper (0 points): Paper with no value whatsoever relative to the assignment, or no paper turned in at all. May describe a project of no value that was not approved for this assignment.

RUBRIC FOR PARTICIPATION AND ATTENDANCE

Exemplary (9-10 points): 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.

Adequate (8 points): 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.

Marginal (7 points): 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.

Inadequate (6 or less points): 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. May fail to exhibit professional behavior and dispositions. **Excessive absences can result in additional penalties and potential withdrawal from class.**

Grading Policy

Weekly Homework Assignments	1 pt each/15pts
Weekly online tests	1 pt each/15 pts
Midterm/Final	20 pts each/40 pts
Proposal	20 pts
Class Participation and Attendance	10 Pts
TOTAL	100 pts

Letter grades will be assigned as follows:

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%		

Tentative Course Organization and Schedule

DATE	TOPIC	ASSIGNED READING	WORK DUE
1. 8/30	Review syllabus- Introduction to the Field of Educational Research		
2. 9/6	Labor Day: No class ☺		
3. 9/13	Overview of Educational Research	Chapters 1 and 2	Homework: p. 17, #1. Use AERJ or JEP if possible. Weekly tests for chapters.
4. 9/20	Identifying Research Problems; Reviewing the Literature	Chapters 3 and 4	Homework: p. 84, #1-2 Weekly tests for chapters.
5. 9/27	Specifying a Purpose; Research Questions	Chapter 5	Homework: Answer Study Questions and Activities, pp. 156-157; #1-3. Weekly tests for chapter.
6. 10/04	Collecting Quantitative Data	Chapter 6	Homework: p. 189, #1. Weekly tests for chapter.
7. 10/12 (Tuesday)	Collecting Qualitative Data	Chapter 7	Homework: p. 219, #1 Weekly tests for chapter.
8. 10/18	Analyzing and Interpreting Quantitative Data	Chapter 8	Mid-Term Exam Weekly tests for chapter.
9. 10/25	Analyzing and Interpreting Qualitative Data; Reporting and Evaluating Research	Chapters 9 and 10	Homework, p. 310, #1. Weekly tests for chapters.

10. 11/1	Experimental and Quasi-Experimental Designs	Chapter 11	Homework: Write 300-350 wd. abstract of Schelske and Deno (1994) Weekly tests for chapter.
11. 11/8	Correlational Designs	Chapter 12	Homework: Write 300-350 wd. abstract of Ting (2000) Weekly tests for chapter.
12. 11/15	Survey Designs	Chapter 13	Homework: Write 300-350 wd. abstract of Gallik (1999). Weekly tests for chapter.
13. 11/22	Grounded Theory and Ethnographic Designs	Chapter 14	Homework: Write 300-350 wd. abstract of Feen-Calligan (1999). Weekly tests for chapter.
14. 11/29	Narrative Research Designs	Chapters 15 and 16	Proposal papers due. Weekly tests for chapters.
15. 12/6	Mixed Methods and Action Research Designs	Chapters 17 and 18	Homework: Write 300-350 wd. abstract of Way et al. (1994). Weekly tests for chapters.
Finals Week 12/13			Final Exam