

**SCHOOL OF GRADUATE AND PROFESSIONAL STUDIES
DEPARTMENT OF EDUCATION
SYLLABUS**

OVERVIEW/SCHEDULE/INSTRUCTIONS

I. INTRODUCTION TO GRADUATE RESEARCH: EDUC 5103

Hours Credit: 3

Dr. Marco Columbus
Classroom: NB 1077
Email: mcolumbus@cameron.edu

Nance Boyer 1078H: 581-2313
Office Hours: As posted

II. COURSE DESCRIPTION AND KNOWLEDGE BASE:

This course is an introduction to historical, experimental, descriptive, and survey research as they relate to seeking solutions to problems within the field of education. Research techniques, the analysis of research results, and the uses of research are explored.

Students pursuing a Master's Degree should have a thorough understanding of the research process at all levels including research for individual classroom purposes, completing in-depth library research, as well as writing research proposals in American Psychological Association (APA) format. The knowledge bases will cover both the consumer and producer perspectives of research. Research methodology, techniques, and literature review information form the course foundation. Class presentation formats include lectures, discussions, learning activities, and demonstrations. The major emphasis of the course is the student research proposal.

III. CONCEPTUAL FRAMEWORK:

Educators who are **COMPETENT** value the subject matter they teach, appreciate multiple teaching strategies, and use fair and consistent practices. Educators who are **CARING** exhibit a belief that all students can learn, demonstrate strong interpersonal skills, and are sensitive to student needs. Educators who are **COMMITTED** are reflective, lifelong learners who demonstrate professionalism and are dedicated to the profession of teaching.



IV. SPECIFIC LEARNING OBJECTIVES:

Each student will:

1. Understand and be able to explain briefly the fundamental concepts (e.g., hypothesis, sampling, replication, external validity) of educational research.
ACEI Standard 1 Know, understand, and use the major concepts, principles, theories, and research related to the development of children and young adolescents to construct learning opportunities that support individual student's development, acquisition of knowledge, and motivation.
2. Understand and be able to explain the specific procedures (e.g., formulating a research problem, selecting a sample, designing a research instrument) involved in the conduct of educational research.
ACEI Standard 2i. Connections across the curriculum. Candidates know, understand, and use the connections among concepts, procedures, and applications from content areas to motivate elementary students, build understanding, and encourage the application of knowledge, skills, tools, and ideas to real world issues.
3. Be able to explain how to perform each of the following procedures (and, if asked, actually perform them):
 - a. Formulate a research problem
 - b. State a research hypothesis related to the research problem
 - c. Identify variables in a hypothesis
 - d. Write a justification for a hypothesis
 - e. Define the terms of a hypothesis
 - f. Conduct a review of the research literature on a given topic
 - g. Locate or develop an instrument to test a hypothesis
 - h. Perform a reliability and validity check on a research instrument
 - i. Identify and seek to control threats to the internal and external validity of a research investigation
 - j. Collect, summarize, and analyze research data using the appropriate instruments and tests
 - k. Write up the findings of a research investigation
 - l. Read a research report with understanding
ACEI Standard 5b. Reflection and evaluation. Candidates are aware of and reflect on their practice in light of research on teaching and resources available for professional learning; they continually evaluate the effects of their professional decisions and actions on students, parents, and other professionals in the learning community and actively seek out opportunities to grow professionally.

Technology – Students may contact professor via email for assistance with assignments or to notify of an upcoming absence.
ACEI Standard 3.3 and 3.5 Use educational technology as an instructional and management tool.

V. **ACTIVITIES, REQUIREMENTS, ASSIGNMENTS:**

ACTIVITIES:

1. The student will read assigned chapters and outside readings before the topics are discussed in class.
2. The student will participate in all class discussions and/or activities.
3. The student will enroll in the on-line accompaniment to the course (Blackboard) and participate in on-line discussions. (To enroll in the Blackboard accompaniment to Introduction to Graduate Research, go to <http://blackboard.cameron.edu>, login using your user id and password.

REQUIREMENTS:

1. The student is responsible for all information presented in the assigned chapters of the textbook, How to design and evaluate research in education (5th ed.). by Fraenkel and Wallen.
2. The student is responsible for all information presented in class and all information posted to the class blackboard site.
3. The student is responsible for all assigned outside readings. The outside readings are available online. The Internet addresses for those readings and links to the articles are posted to Blackboard in the "External Links" section.
4. The student is responsible for his/her own work. Copying, plagiarism, or other forms of academic dishonesty are not acceptable behaviors. If a student engages in any form of academic dishonesty, action will be taken in accordance with university policy (see Student Handbook).
5. A 5 hour field component is included in this course. Your field component must be completed in the school assigned by the Coordinator of Field Experiences. Any changes in your field placement must be approved by the Coordinator of Field Experiences. 5 clock hours of observation must be completed even if assignments related to the observations are not submitted. Anyone, failing to complete 5 clock hours for the field placement in the assigned school has not completed course requirements and will receive an "F" in the course. The student must retake the course and will required to complete all assignments, exams, and the full 5 hours of field experience that are part of the course.

ASSIGNMENTS:

1. Literature review (40 pts.)
The literature review will address a specified research question by reporting findings from a minimum of eight empirical research articles, at least two of which must be qualitative studies and at least two of which must be quantitative studies. The paper should demonstrate critical reading of the research articles and a synthesis (not simply a summation) of findings. The paper should be about 10-11 double-spaced pages long.

The purpose of this lit review is to report findings to your reader in a manner that synthesizes across individual studies. Rather than having individual paragraphs address individual research studies, individual paragraphs should address separate aspects of the research question/issue (if you are writing a “research paper”) or steps in the rationale leading to the study you propose to conduct (if you are writing the introduction to a research study). In either case, synthesizing across individual studies shows the bigger picture of what is known or the logic of why your study is needed. You may report methodological details from individual studies as they are pertinent to building your case or interpreting particular findings, but otherwise such details are not necessary. It is appropriate to make general statements about the quality of individual studies, or of the collection of studies, in the conclusion section of the lit review. See the Checklist for Literature Reviews on learn.ou.edu for evaluation criteria.

A detailed outline and annotated bibliography are due September 12th
A complete draft of the literature review is due November 14th.

2. Peer review of literature reviews (10 pts.)
We will conduct in-class peer reviews of the literature reviews. You will earn 10 points for the peer review session provided you (a) arrive in class on time with a *complete* draft of your literature review in hand, and (b) actively participate in the peer reviewer process. You will have one week to make final revisions to the literature review based on the peer reviews.

The final draft of the literature review is due November 20th.

3. Reflection Article review (25 pts.)
Using the forms provided, you will evaluate one empirical research article that utilizes a quantitative design.

4. Exams (90 pts. total)
The two exams will be a combination of multiple choice, short answer, and short essay. Objectives for each exam are posted on blackboard.cameron.edu. Exam dates are on the course schedule. Make-up exams will be scheduled only in emergencies. Contact me ahead of time if you must miss an exam.

5. Final Examination (45 pts.)
The final exam will be cumulative, in that all three units will be represented. It will be based on the same instructional objectives as the unit exams. Because you will be doing substantial writing throughout the semester, the final exam will be all objective (i.e., multiple choice and matching).
6. Observation Assignment (25 pts.)
For the 5 hour field component included in the course, students are required to observe activities and behaviors that correspond to specific course content. Specific classroom observation questions will be given for your observation. The observation questions, specific instructions for observation assignments, form for recording times (accompanied by the teacher's signature) and scoring criteria are available in the "Assignments" section of Blackboard. Observation assignments **must be typewritten, double-spaced.**
7. Class Participation and Activities (25 pts)
This class has been designed with the intention that a lot of the learning will go on during class time. Therefore, attendance and active involvement are expected. Additionally, you are now in a professional education program. This means you are expected to demonstrate the demeanor of a professional. By professional demeanor I mean coming to class.
8. **Each student will:**
 1. Read text assignments, attend class, prepare for quizzes, and complete class activities.
 2. Prepare and submit all assignments in a timely manner.
 3. Prepare and submit an original research proposal in a timely manner.
 4. Prepare for and demonstrate an on-going understanding of course instruction through exams.
 5. Present his/her proposal to the class.

VI. TEXTBOOKS/MATERIALS:

American Psychological Association. (2001). Publication *manual of the American psychological association* (5th ed.). Washington D.C.: American Psychological Association.

Fraenkel, J.R., & Wallen, N.E. (2003). *How to design and evaluate research in education* (5th ed.). New York: McGraw-Hill.

VII. EVALUATION AND GRADING:

Course grades will be assigned as follows:

Research Reflection Article Review	25 points	
Two (2) Exams	90 points	
Final Exam	45 points	
Class Participation, Activities & Quizzes	25 points	
Literature Review Proposal	40 points	
Peer Review of Literature Reviews	10 points	
Observation Assignment	25 points	
TOTAL	260 points	
A = 260—234	C = 207—182	F = below 155 (below 60%)
B = 233—208	D = 181—156	

Assignments are due **at the beginning of** class on the date noted in the calendar. Late work must be submitted to the instructor no later than the class immediately following the original due date. No work will be accepted after that time. Grading on late work will begin at 80% of the total possible points therefore yielding a B at best for a final grade on the assignment. Unless a **valid** emergency arises, there will be no opportunities to make up missed exams. What constitutes a valid emergency is at the discretion of the instructor. It is the student's responsibility to notify the instructor **immediately** upon realizing a conflict with an exam date or the inability to take an exam at the scheduled time. Both the student and instructor will keep a written and accurate record of when assignments are submitted. **There will be no opportunities to make up missed class activities and quizzes. Extra credit is not an option in this course. Quizzes may or may not be announced, and may be given at any time. Students must be present on the date class assignments are given to receive credit.**

The proposal will be evaluated in two ways: adherence to APA format, and accordance with the research processes and mechanics discussed and demonstrated in class.

Specifics for the proposal include:

- a. a title page and abstract in APA format
- b. a reference page(s) listing all sources cited in the proposal (minimum number of cited references) ten (10)
- c. a minimum length of ten (10) double-spaced typed pages in addition to the cover sheet and reference page(s)
- d. sources used dating no earlier than ten (15) years from the current year
- e. adherence to correct research documentation standards:
 1. no use of first person by author ("This writer/This researcher")
 2. no cites in text not on reference page(s)
 3. no references not cited in text
 4. no statements by the author not substantiated by research.

5. credit for text derived from existing research must be credited to the appropriate reference
- f. construct the proposal as an integrated product of all existing research. Summaries of individual referenced articles, one after another, will result in a poor, unprofessional proposal.
- g. produce a proposal that identifies a problem or question; incorporates, interweaves, and credits existing literature review research
- h. only refereed, professional journals as primary references
- i. all proposal topics must be approved by the instructor. Also, any changes in proposed topics must be approved by instructor. Failure to obtain approval and submit proposals in approved area will result in a maximum grade of 50% of the total possible points on the proposal.
- j. all students should have their proposal topics approved by Dr. Columbus before the topic deadline in order to receive assistance in identifying an appropriate proposal topic.

APA format must be followed: type font no larger than 12 point, standard left and right, and top and bottom margins, and the following sections: Introduction, Literature Review, and Discussion. Each of these sections should include all subsections (as necessary for the research style employed) discussed and demonstrated in class.

VIII. ATTENDANCE/WITHDRAWAL POLICY:

This is a graduate level course – class attendance is **REQUIRED**. You should be in class **AND ON TIME** for each class meeting. If you feel that you will be tardy consistently, you should reconsider enrolling in this class at this time. **Students who miss three or more classes will receive an F;** therefore they should withdraw according to Cameron University policy to avoid receiving a failing grade for non-attendance.

It is the responsibility of the student to fully complete the official process for withdrawing from the course.

Last date to enroll or add a class...August 27, 2007

Last date to drop without entry on transcript...August 31, 2007

Last date to drop with a full refund... August 31, 2007

Last date to withdraw with an automatic 'W'...November 14, 2007

Last date to withdraw from a class...December 3, 2007

This course outline is **Tentative**, and will be adjusted as needed according to the vagaries of time and at the whim of the instructor.

IX. COURSE OUTLINE AND SCHEDULE

DATE	TOPIC	CHAPTER	ITEMS DUE
Week 1 8/22	Syllabus, Nature of Educational Research	1	

Week 2 8/29	Research Problem Variables & Hypotheses	2-3	
Week 3 9/5	Ethics and Research Review of Literature	4-5	
Week 4 9/12	Library/Lit. Review Sampling Cooperative Group Work	6	Topic Approval Deadline**
Week 5 9/19	Exam 1 Instrumentation	7	EXAM #1
Week 6 9/26	Validity & Reliability Internal Validity	8-9	Research Reflection #1
Week 7 10/3	Descriptive Statistics, Inferential Statistics Statistical Analysis	10-12	
Week 8 10/10	Experimental Research Single-Subject Research Correlational Research	13-15	Cooperative Group Presentations
Week 9 10/17	Causal-Comparative Res. Survey Research Cooperative Group	16-17	
Week 10 10/24	Exam 2		EXAM #2
Week 11 10/31	Nature of Qual. Research Observation & Interview.	18-19	
Week 12 11/7	Content Analysis Ethnographic Research Historical Research	20-22	Observation Assignment Due
Week 13 11/14	Action Research Preparing Research Proposals and Reports Peer Review of Literature Reviews	23-24	Peer Review of Literature Reviews
Week 14 11/20	Individual/Presentation of Papers		LITERATURE REVIEW PROPOSAL
Week 15 11/27	Cooperative Group Work		

Week 16 12/5	Final Exam		EXAM #3
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Each student must have a topic approved by Dr. Columbus no later than September 21. Cameron University is committed to making its activities as accessible as possible. The University provides a range of special services for those with disabilities. If you anticipate a need for any of those services, please contact the **Cameron University Disabled Student Services office, located in 326 N. Shepler, 2800 W. Gore Boulevard, Lawton, OK 73505-6377. Phone (580) 581-2209. Website at http://www.cameron.edu/disabled_services

X. BIBLIOGRAPHY:

Best, J.W., & Kahn, J.V. (1993). *Research in education*. (3rd ed.). Needham Heights, MA: Simon & Schuster.

Borg, W.R., & Gall, M.D. (1989). *Educational research: An introduction*. (5th ed.) New York: Longman

Creswell, J. W. (2005). *Educational Research: Planning, conducting, and evaluating quantitative and qualitative research*. (2nd ed.). New Jersey: Pearson Prentice Hall

Gall, J.P., Gall, M.D., & Borg, W.R. (2005). *Applying Educational Research*. (5th ed.). New York: Longman

Gay, L.R. (1992). *Educational research: Competencies for analysis and application*. New York: Macmillan.

Glass, G.B., & Hopkins, K.D. (1984). *Statistical methods in education and psychology*. (2nd ed.) Englewood Cliffs, NJ: Prentice Hall

Hall, M. (1988). *Getting funded: A complete guide to proposal writing*. Portland: Continuing Education Publications.

Huck, S. W. (2004). *Reading statistics and research*. (4th ed.). New York: Pearson
Johnson, B., & Christensen, L. (2004) *Educational research: Quantitative, qualitative, and mixed approaches*. (2nd ed.). New York: Pearson

McMillan, J. H. (2004). *Educational research: Fundamentals for the consumer*. (4th ed.). New York: Pearson

Mertler, C. A., & Charles, C. M. (2005). *Introduction to educational research*. (5th ed.). New York: Pearson

Thorkildsen, R., & Scott Stein, M.R. (1998). *Is parent involvement related to student achievement? Exploring the evidence*. Center for Evaluation, Development, and Research,

Phi Delta Kappa International, 1998, 22. Tuckman, B.W. (1994). *Conducting education research*. (4th ed.). New York: Harcourt Brace Jovanovich.

Wiersma, W., & Jurs, S. G. (2005). *Research methods in education: An introduction*. (8th ed.). New York: Pearson