

AUBURN UNIVERSITY SYLLABUS

Course Number: ERMA 7200
Course Title: Basic Methods in Educational Research
Credit Hours: 3 semester hours (Lecture 3)
Prerequisites: None
Corequisite: None
Instructor: Dr. Jennifer L. Bell
(belljen@auburn.edu)
Office Hours: By appointment

Date Syllabus Prepared: January 2010

Text: Gall, M. D., Gall, J. P., & Borg, W. R. (2010). *Applying educational research: How to read, do, and use research to solve problems of practice* (6th Edition). Boston: Pearson Education, Inc. ISBN-10: 0-205-59670-3

Course Description:

The goal of this course is to help graduate students in education learn how to use the methods and findings of educational research to address their professional needs, interests, and problems. They will learn about the nature of educational research, how to access and review the research literature about education, and how to read and evaluate articles that report research studies. Also, they will learn the range of methodologies that educational researchers use. Students will complete a course project that gives them the opportunity to select a problem of practice that interests them and write a review of research studies that are relevant to solving this problem.

Course Objectives:

Upon completion of this course the student will be able to:

1. Identify a research problem.
2. State a research question(s) amenable to research techniques using empirical methods.
3. Develop where appropriate testable hypotheses based on these questions.
4. Describe a research design appropriate for investigating each question.
5. Choose an appropriate data analysis strategy for each design.
6. Develop or choose appropriate measures for each variable.
7. Plan for establishing the reliability and validity of each measure.
8. Critique the research design of various research situations in terms of approaches to sampling, instrumentation, and threats to internal and external validity.
9. Integrate elements of the research process into a research proposal.
10. Review and critique articles using these procedures in educational contexts.

Course Schedule:

Date	Topics	Readings	Assignment Due
January 12 (on AU main campus)	I. Introduction The Purpose of Educational Research Process Quantitative and Qualitative Methods Identifying the Research Problem	Gall, Gall, Borg (GGB), Chapters 1 - 2	
January 19	Blackboard Assignment 1B	<i>Class Size and Interaction in Online Courses</i> (Orellana, A., 2006) <i>Recognition of Workplace Bullying</i> (Lewis, S. E., 2006)	<ul style="list-style-type: none"> • Statement of Research Problem for Research Proposal • Assignment 1B
January 26 (on AU main campus)	II. Reviewing the Literature	GGB, Chapters 3 - 5	
February 2	Blackboard Assignment 2B		<ul style="list-style-type: none"> • Purpose of the Study for Research Proposal • Assignment 2B
February 9 (on AU main campus)	III. Using Quantitative Methods: Part 1 Analyzing & Evaluating Quantitative Research Descriptive Statistics	GGB, Chapters 6 - 7	<ul style="list-style-type: none"> • Research Article Analysis & Evaluation • 5 interview questions HW assignment
February 16	Blackboard Assignment 3B		<ul style="list-style-type: none"> • Assignment 3B
February 23 (on AU main campus)	IV. Using Quantitative Methods: Part 2 Statistical Significance Descriptive Research	GGB, Chapters 8 - 10	<ul style="list-style-type: none"> • Review of Literature for Research Proposal
March 2	Blackboard Assignment 4B		<ul style="list-style-type: none"> • Assignment 4B • Research Design for Research Proposal
March 9 (on AU main campus)	V. Using Quantitative Methods: Part 3 Group Comparison Research Correlational Research Experimental Research	GGB, Chapters 11 - 13	<ul style="list-style-type: none"> • Data Collection HW assignment
March 16	Spring Break		
March 23	Blackboard Assignment 5B		<ul style="list-style-type: none"> • Assignment 5B • Methods for Research Proposal
March 30 (on AU main campus)	VI. Using Qualitative Methods Case Studies Narrative Research Ethnography Historical Research	GGB, Chapters 14 - 17	

Date	Topics	Readings	Assignment Due
April 6	Blackboard Assignment 6B		<ul style="list-style-type: none"> Assignment 6B Data Analysis for Research Proposal
April 13 (on AU main campus)	VII. Mixed-Methods & Other Research Methods Mixed-Methods Research Action Research Evaluation Research	GGB, Chapters 18 - 20	<ul style="list-style-type: none"> IRB Protocol
April 20	Blackboard Assignment 7B		<ul style="list-style-type: none"> Assignment 7B Final Research Proposal with all components
April 27 (on AU main campus)	Last Class (Course Wrap-Up)	TBA	

Course Requirements:

- Attend all class sessions and participate in class discussions and activities.
- Complete all quizzes and assignments.
- Complete research article analysis and evaluation.
- Complete course project.
 - Prepare a research proposal for submission to a professional conference (e.g., Eastern Educational Research Association, American Educational Research Association) prior to the end of the semester.

Grading and Evaluation Procedures:

	Percentage of Final Grade
Attendance and Participation	5%
In-classes Quizzes	15%
Homework & Blackboard Assignments	15%
Research Article Analysis & Evaluation	20%
Course Project	45%

The following grading scale will be used:

90% - 100%	= A
80% - 89.99%	= B
70% - 79.99%	= C
60% - 69.99%	= D
Below 60%	= F

Course Assignments:

Class and Group Participation (5%)

In order to explore topics effectively, attendance and class participation are essential. The evaluation of class participation will be made as follows.

- a. *Attendance.* You are expected to attend class and be on time. If you are unable to attend class (and you have a valid excuse), you are responsible for making arrangements to complete that week's responsibilities. Students missing more than 20% of course meetings will have their final grade reduced by one letter grade.
- b. *Readings and Class Preparation.* You must complete the assigned readings prior to each class meeting. To prepare for each class, you are encouraged to make notes and/or highlight your textbook.

In-Class Quizzes (15%)

Quizzes will be completed in relation to the course readings. After reading the required readings (and studying), the quiz for that reading will be administered during the last 30 minutes of the scheduled class meeting. Students may use their personal notes and textbook but may not use materials of their fellow classmates.

Homework & Blackboard Assignments (15%)

Multiple assignments will be completed as they relate to course content. These assignments include responses to research articles, scenarios, and other take-home assignments pertaining to the variety of research procedures examined throughout the course. Blackboard Assignments will be submitted on the scheduled day by 9:00 PM CST. Homework Assignments will be collected during the scheduled class meeting. Any assignment presented or turned in late will be penalized 5% per day. Assignments more than 2 weeks overdue will not be accepted.

Research Article Analysis & Evaluation (20%)

You will find one original, primary educational research article and analyze it in detail. Your assignment must include a hard copy of the original article, which must fit the selection criteria, be cited correctly using APA format for references, and contained a brief but clearly written summary of the article. In addition to summarizing the content, you will answer each of the following questions: (See rubric on blackboard for grading.)

- What is the purpose(s) of the research, the research question(s) or hypothesis(es)?
- What type(s) or class of research (e.g., descriptive, experimental, etc.)?
- Who or what is the population and sample being studied and how was the sample selected?
- What are the constructs and their definition? What are the variables that they measure?
- What type(s) of data were collected? What methods were used to collect data?
- How were the data analyzed? What methods were used and if numeric data were collected, what statistical procedures or analyses were applied?
- What was the researcher's interpretation or conclusion? Do the data and procedures support the interpretation or conclusion?
- What are the implications for educational practice?

Course Project: Research Proposal (45%)

The class will explore several potential research projects throughout the course. You will identify a problem that is worth examining (perhaps in your classroom or school) and prepare a proposal to conduct such research. This project will be completed in phases so that you can get feedback along the way. We will also discuss these projects throughout the course. You should try to identify an issue that you intend to research and complete the steps necessary to plan and implement this study. These steps include a preliminary review of literature, preparation of an IRB protocol, and proposal for implementing the research project. The length of the proposal should be between 1,500-2,500 words without references. (See rubric on blackboard for grading.)

This proposal will include:

1. Abstract
2. Statement of the Research Problem
3. Review of Literature
4. Purpose, Research Question, or Hypothesis including operational definitions of the critical variables to be examined.
5. Research Design
6. Measures including a description of the methods (surveys, observation, interview, etc.) that you will use to gather the information needed to address your research problem.
7. Setting and Participants including a description of the setting (school and grade level, etc.) and participants from which you will gather the data.
8. Data Collection Procedures
9. Data Analysis including a description of quantitative and/or qualitative research methods which you will use to analyze the collected data.

From American Educational Research Association (AERA) Proposal Guidelines:

The final step in the submission process is uploading the proposal summary. ***Provide a summary of 2,000 words or fewer*** (excluding references) for use in judging the merits of the proposed paper. The summary should deal explicitly with as many of the following as are applicable, preferably in this order:

1. Objectives or purposes
2. Perspective(s) or theoretical framework
3. Methods, techniques, or modes of inquiry
4. Data sources or evidence
5. Results and/or conclusions/point of view
6. Educational or scientific importance of the study

Style Guidelines for all Assignments:

- *Line spacing:* All text double spaced.
- *Font:* 12 point Times New Roman.
- *Margins:* one inch on all sides.
- *Page numbering:* All pages numbered consecutively.

- *Appearance:* Neat, consistent style of headings, indentations, figures, tables, references, appendices, etc. in APA format.
- *Identification:* Type your name at the top of the first page.
- *Binding:* Use a staple or clamp on the upper left corner to hold the papers together.

Class Policy Statements:

- A. Students are expected to attend all class meetings and participate in class activities (Tiger Cub, page 73). Should students need to be absent from a class for whatever reason, they are expected to contact the instructor in advance.
- B. Students are responsible for initiating arrangements for missed work due to excused absences (Tiger Cub, page 74).
- C. Students who need special accommodations should make an appointment to discuss the Accommodation Memo within the first 2 weeks of class. If you do not have an Accommodation Memo, please contact Dr. Kelly Haynes, Director, Program for Students with Disabilities, 1244 Haley Center, (334) 844-2096.
- D. All portions of the Auburn University Honesty Code found in the Tiger Cub (Title XIII) will apply to this class.