

# EDU 721

## Educational Research

Summer I, 2009

Daily: Week 1 & 2: 10 a.m.-12 noon

Week 3 & 4: 4:00 – 6:00 p.m.

TR B216

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### Course Description:

Theory, construction, and procedures of empirical research dealing with educational problems. Qualitative and quantitative research methods. Analysis and evaluation of research studies; experience in the design and execution of research studies. Descriptive, inferential, and nonparametric statistical procedures. Computer analysis.

### Course Objectives:

1. Define and explain various aspects of educational research,
2. Interpret published research studies in education,
3. Demonstrate the use of descriptive statistics and tools such as tables and graphs to describe data, (Excel)
4. Explain the concept of inference and statistical significance,
5. Define and describe quantitative research methods, including data collection and data analysis procedures. (SPSS)
6. Define and describe qualitative research methods, including data collection and data analysis procedures. (Inspiration)
7. Produce a proposal for research in education,

### Required Text:

Gay, L. R., Mills, G. E., & Airasian, P. (2009). *Educational Research: Competencies for Analysis and Application*. (9th Ed.) Columbus, OH: Merrill.

### Web Resources:

<http://www.wfu.edu/~mccoy/research.htm>

### Attendance/Participation:

Students are expected to be present and actively involved in each class session.

### Assignments/Evaluation:

Grading Scale: 93-100=A, 85-92=B, 75-84=C, Below 75=F  
(Late assignments will be penalized.)

<b>DATE</b>	<b>TOPIC</b>	<b>READING</b>	<b>DUE</b>
Mon. 6/1	Introduction	<i>Battista</i>	
Tues. 6/2	Computer Orientation IS 262 - Giz Womack		
Wed. 6/3	Research Types Research Topics	<i>Gay</i> <i>Ch. 1, 2</i>	
Thur. 6/4	Reviewing the Literature ERIC Exercise	<i>Gay</i> <i>Ch. 3</i>	<b>ERIC SEARCH (in-class)</b>
Fri. 6/5	Sample Measurement	<i>Gay</i> <i>Ch. 5, 6</i>	<b>ETHICS REFLECTION</b>
Mon. 6/8	QUIZ 1 Sample Article		<b>QUIZ (In-class)</b>
Tues. 6/9	Survey Research Correlational Research	<i>Gay</i> <i>Ch. 7, 8</i>	
Wed. 6/10	Descriptive Statistics EXCEL	<i>Gay</i> <i>Ch. 12</i>	<b>BIBLIOGRAPHY</b>
Thur. 6/11	Causal-Comparative Research Experimental Research	<i>Gay</i> <i>Ch. 9, 10</i>	
Fri. 6/12	Article I Group Presentations		<b>GROUP ARTICLE PRESENTATION</b>
Mon. 6/15	Inferential Statistics SPSS	<i>Gay</i> <i>Ch. 13</i>	<b>ANALYSIS I - EXCEL</b>
Tues. 6/16	Content Research	<i>Review of Res in Ed article</i>	<b>CONTENT RESEARCH OVERVIEW</b>
Wed. 6/17	Qualitative Data Collection	<i>Gay</i> <i>Ch. 14</i>	
Thur. 6/18	Narrative Research. Ethnographic Research Case Study Research	<i>Gay</i> <i>Ch. 15, 16, 17</i>	<b>ANALYSIS II – SPSS</b>
Fri. 6/19	Article II Group Presentations		<b>GROUP ARTICLE PRESENTATION</b>
Mon. 6/22	Qualitative Data Analysis Inspiration Software	<i>Gay</i> <i>Ch. 18</i>	
Tues. 6/23	QUIZ 2		<b>QUIZ (In-class)</b>
Wed. 6/24	Planning for the Study The R-Map Steps in the Research Process	<i>Gay</i> <i>Ch. 4</i>	<b>ANALYSIS III –INSPIRATION</b>
Thur. 6/25	Research Presentations 1		<b>PROPOSAL PRESENTATION</b>
Fri. 6/26	Research Presentations 2		<b>PROPOSAL PRESENTATION PROPOSAL DUE (11:59 P.M)</b>

## ASSESSMENTS

1. **ERIC Search.** You will complete an in-class online scavenger hunt using the ERIC database. [5%]
2. **Ethics Reflection.** Read and reflect on your interpretation and reaction to the legal and ethical considerations discussed in Chapter 1. What are your responsibilities as far as research ethics? (250-300 words) [10%]
3. **QUIZ 1.** Chapters 1-6. Vocabulary and basic concepts. Multiple choice and short answer. [10%]
4. **Article I.** – Group Presentation. Your group will analyze an article and describe it for the class in a PowerPoint presentation. See outline. One copy of the PowerPoint handouts will be turned in per group. [5%]
5. **Analysis I - EXCEL.** Using online NCLB data, you will organize and summarize graphically to answer questions. [10%]
6. **Content Research Overview.** You will read the assigned article for your content area in *Review of Research in Education*. During class, you will meet as a content group and discuss the research in your content area. The next day, you will turn in a list of 5 important/interesting topics from the article. Each topic should have a 50-60 word description. [5%]
7. **Bibliography.** Choose a working topic and locate references for that topic. Collect a list of three research articles that might be used in the literature review. Include at least 1 journal article (EJ), and at least 1 ERIC document (ED). For each source, give the reference in APA format. [10%]
8. **Analysis II - SPSS.** Using assigned numerical data, you will enter into SPSS, run appropriate analysis, and state results. [10%]
9. **Article II.** – Group Presentation. Your group will analyze an article and describe it for the class in a PowerPoint presentation. See outline. One copy of the PowerPoint handouts will be turned in per group. [5%]
10. **Analysis III - Inspiration.** Using assigned narrative data, organize using Inspiration and draw conclusions. [10%]
11. **QUIZ 2.** Chapters 7-19. Vocabulary and basic concepts. Article analysis. [10%]
12. **PROPOSAL.** Each student will write a proposal for educational research that might be carried out in the fall EDU 715 course. The proposal may be quantitative or qualitative. You must have at least 3 references for this assignment (more in the fall!!). You will share a brief overview of your proposed study with the class and turn in a written proposal. It is recommended that you share this proposal with your advisor over the summer as a starting point for discussion about the fall project. [10%]

### **Article Review Format (12-15 slides)**

1. APA Reference
2. Vocabulary
3. Research Question
4. Type of Research (by method and purpose)
5. Methodology (Subjects, Measures/Procedures, Analysis)
6. Criteria (Truth, Utility, Methodological Merit, Provision of Insight)
7. Results
8. Implications for your teaching

### **Proposal Format (1-2 pages)**

1. Introduction
  - a. Review of Literature (brief)
  - b. Research Question
2. Methodology
  - a. Subjects
  - b. Measures/Procedures
  - c. Analysis
3. References (APA format)

*Note: This is the same format you will use for your project proposal in EDU 715 next fall. Your final research project paper will have roughly these same chapters, with Results and Conclusions added after #2*

**CITI:** CITI Training is required of ALL researchers submitting a Research Proposal to the IRB. The CITI online tutorial gives an overview of the primary issues related to research involving human participants. You will be submitting your proposal for the research project for EDU 715 in September. Please make sure that you have completed the CITI training by August 26 when you return to school. You will turn in your Completion Record to your advisor at that time. A score of 80% is required.

**See:** [www.citiprogram.org](http://www.citiprogram.org)

**Also:** <http://www.wfu.edu/rsp/irb/education.html>

**IRB Responsibilities:** You will be working with your adviser during the fall semester to complete e-IRB procedures before you begin any data collection.

**See:** <http://www.wfu.edu/rsp/irb/index.html>