Fundamentals of Graduate Research in Education Educational Foundations 6481 (3 credits)

Fall 2012

Tuesdays 5:30-8:20

Stephen A. Sivo, Ph.D.Office Hours: Tues. 2:45 p.m.-5:15 p.m.Room EDU 222-QFri. 12:00-1:00, 4:00-5:30Phone: 407-823-4147or by appointmentE-mail: ssivo@mail.ucf.eduWeb site: http://pegasus.cc.ucf.edu/~ssivo/

Required Reading

Gall, M., Gall, J., & Borg, W. (2010). *Applying educational research* (6th Ed.). White Plains, NY: Longman.

Course Description

This course is designed to introduce you to the technical and methodological issues underlying the educational and psychological research. The dynamic interplay between educational theory and research will be stressed with the intent of developing the skills of critical analysis required of enlightened consumers of research in the field of education.

Conceptual Framework

Please review the College of Education's Conceptual Framework (see http://edcollege.ucf.edu/ssivo/ClassHandouts/Conceptual_Framework.doc).

Learning Objectives

This course was designed to help students

- 1. Describe the overall scientific research process and philosophical issues.
- 2. Define and delimit a research problem, research question and hypothesis.
- 3. Describe the different ways of designing or planning a research investigation.
- 4. Describe methods of collecting educational research data.
- 5. Identify the external and internal threats to the validity of a design.
- 6. Identify data quality issues associated with different kinds of research methodology including the role of measurement in the solution of educational problems.
- 7. Identify the appropriate analytical strategies for particular research investigations.
- 8. Critically analyze research reports in the literature.

Course Requirements

1. <u>Homework</u> (**100 points**) Homework assignments will involve answering questions to problems in assigned chapters or electronically distributed work sheets. Homework will not always be collected, but it will be reviewed in class as a class activity. To some degree this reflects an honor system, but the failure to complete homework as assigned may affect overall competence to complete graded work and exams. You automatically receive full credit for uncollected homework, but credit for collected homework is based on completion. Assigned homework is for your benefit because it is designed to prepare you for the exams.

Please Note: I require hard copies of all homework (whether or not it's collected). Be prepared to bring your work to class each week. Electronic copies will be accepted only in times of hardship as judged by the professor.

- 2. <u>Exams</u> 1 and 2 (**200 points**) The Midterm will require students to answer multiple choice questions and/or complete questions associated with vignettes. Vignettes on the midterm will be very much like the vignettes completed in class for class activities. They require a student to read a brief research scenario, and then answer a set of questions about the methodology needed for such a study. Key concepts will include operational definitions, measurement, research questions, the core research process (Students will drop the lowest exam grade).
- 3. <u>Final</u> (**200 points**) The final exam will be comprehensive requiring students to answer multiple choice questions and/or complete questions associated with vignettes.

Grading Criteria

Grades will be assigned according to the percentage of total points correct, with the following grade system. (**Total = 500 points**)

90% and above	$(\geq 450 \text{ points}) = A$
80% - 89%	(400 to 449 points) = B
70% - 79%	(350 to 399 points) = C
Below 70%	$(\leq 349 \text{ points}) = F$

Attendance Policy

Attendance is necessary to stay on top of class material and homework assignments. Students are encouraged to come to class, but are left with the responsibility of managing their own attendance. Attendance will be taken for the purpose of explaining poor performance should the need arise.

Observing the Golden Rule

Student performance on all examinations and assignments for this course should comply with the standards detailed in the Student Academic Behavior section of the Golden Rule Student Handbook (available in the Office of Judicial Programs). This means that you may not give or receive any assistance on exams/assignments, discuss exam/assignment content, questions, or answers with others. Plagiarism is also a Golden Rule violation. Golden Rule offenses may result in your expulsion from the university.

Students with Disabilities

Students with disabilities who require special accommodations are strongly encouraged to notify the professor and contact the Office of Student Disabilities for assistance in receiving any special accommodations (located in the Student Resource Center 132). The office contact information is:

Phone (407) 823-2371 TDD Users Only (407) 823-2116 Fax (407) 823-2372 Email at <u>sds@mail.ucf.edu</u>

Go to the following web site to find an extensive list of information about what Special Accommodations are commonly made: http://www.sds.ucf.edu

Tentative Agenda

	Topic	Related Reading
08/21	Class #1: Introduction to Educational Research	Chapter 1 & 6
0.0/00		(pp 124-126)
08/28	Class #2: The structure of a research study	Chapters 2 & 7 (pp 151-154)
	The concept of Measurement	(pp 101-104)
09/04	Class #3: Operational Definitions	Chapter 6
	Validity and Reliability	(pp 132-142)
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09/11	Class #4: Posing Research Questions/Hypotheses Sampling	Chapter 6 (pp 127-131)
	Samping	(pp 12, 101)
09/18		
	** Exam 1 **	
00/05		
09/25	Class #5: Descriptive and Causal-Comparative	Chapter 10-11
	(Group Comparison) Research	
10/02	Class #6: Correlational Research	Chapter 12
10/09	Class #7: Experimental Research and	Chapter 13
	Quasi-experimental Research	
10/16	Class #8: Experimental Research and	Chapter 13
10/10	Quasi-experimental Research	Chapter 15
10/23		
	** Exam 2 **	
10/30	Class #9: Qualitative Research: An overview	Chapters
10/30	Class #5: Quantative Research: An overview	14, 15 & 16
		,
11/06	Class #10: Qualitative Research	Chapters
		14, 15 & 16
11/13	Class #11: Action and Evaluation Research	Chapter 19-20
01/11	Viass #11. Action and Evaluation Research	Onapter 15-20
11/20		
	*** Thanksgiving week No Class ***	
11/05		
11/27	Class #12: Review (with in-class activities)	
12/04	** Final Exam **	