Research Project in Educational Psychology: Sequence I

George Mason University
College of Education and Human Development

Dr. Anastasia Kitsantas **Fall, 2009**
EDEP 824 001
Class Meeting: Robinson Hall A, Room 350, M 4:30-7:10 PM
Office: Robinson Hall, Room 353D **Phone:** (703) 993-2688
Office Hours: M 1:30-2:30 PM **E-mail:** akitsant@gmu.edu
Other hours may be arranged by appointment.

A. Prerequisites: EDEP823

B. Focuses on the development and implementation of research studies in educational psychology. Students will acquire skills regarding analyzing and interpreting data. Second in two course sequence.

NATURE OF COURSE DELIVERY: This course consists of lectures, group and electronic discussions, in class activities, and individual/group assignments.

LEARNER OUTCOMES:

This course is designed to enable students to:

- conduct statistical analyses using SPSS and AMOS
- demonstrate an understanding of software such as NVIVO when conducting qualitative analyses
- interpret findings
- report and discuss research findings
- discuss educational applications and limitations of enacted research study
- discuss future research in the area of interest
- write a research proposal for a conference submission
- develop manuscript for presentation and/or publication

PROFESSIONAL STANDARDS:

The program goals are consistent with the following Learner-Centered Psychological Principles outlined by the American Psychological Association Presidential Task Force in Education (APA, Division 15).

- Principle 1: The Nature of Learning Process
- Principle 2: Goals of the Learning Process
- Principle 3: Construction of Knowledge
- Principle 4: Strategic Thinking
- Principle 5: Thinking about Thinking
- Principle 6: Context of Learning
- Principle 7: Motivational and Emotional Influences on Learning
- Principle 8: Intrinsic Motivation to Learn
- Principle 9: Effects of Motivation on Effort
- Principle 11: Social Influences on Learning
- Principle 13: Learning and Diversity

For more information please see:
American Psychological Association (1997). Learner-Centered Psychological Principles*:* *Guidelines for the Teaching of Educational Psychology in Teacher Education Programs*. Retrieved October 14, 2002 from http://www.apa.org

REQUIRED TEXTS:

Green, S. B., & Salkind, N. J. (2007). *Using SPSS for Windows and Macintosh: Analyzing and understanding data* (5th edition). Upper Saddle River, New Jersey.

American Psychological Association (2009). *Publication Manual of the American Psychological Association* (6th Edition). Washington DC: American Psychological Association.

COURSE REQUIREMENTS, PERFORMANCE-BASED ASSESSMENT, AND EVALUATION CRITERIA:

A. Course Requirements

It is expected that each of you will:

1. Read all assigned materials for the course
2. Critique, present/discuss an empirical article in class *
3. Participate in classroom activities that reflect critical reading of materials

4. Write a research proposal and present in class
5. Attend each class session

B. Performance-based assessments

Please see rubric

C. Course Evaluation

1. Research Project-Sequence II: Students will use their proposal and data collection from Sequence I, and continue with the research and writing process. The paper should now include the following sections :(1) Results (2) Discussion (2) Educational Applications and Limitations and (3) Future Research. The research proposal will be submitted as a final term paper, and it will be presented at the end of the semester. Research papers must adhere to the APA Publication Manual Guidelines. Each student will also locate, evaluate, and present an empirical research article in class using a similar methodological approach to analyze the data (date of presentation will be assigned in class).

2. 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. Late assignments will not be accepted unless a serious emergency arises and the instructor is notified promptly.

D. Grading Policy

Review and Presentation of an Empirical Article	10pts
Research Paper Presentation: Sequence II	10pts
Final Research paper: Sequence II	70pts
Class Participation and Attendance	10 pts
TOTAL	**100 pts**

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%		

COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT STATEMENT OF EXPECTATIONS:

All students must abide by the following:

Students are expected to exhibit professional behavior and dispositions. See http://gse.gmu.edu/facultystaffres/profdisp.htm for a listing of these dispositions.

Students must follow the guidelines of the University Honor Code. See http://www.gmu.edu/catalog/apolicies/#Anchor12 for the full honor code.

Students must agree to abide by the university policy for Responsible Use of Computing. See http://www.gmu.edu/facstaff/policy/newpolicy/1301gen.html.
Click on responsible Use of Computing Policy 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 http://www.gmu.edu/student/drc/ or call 703-993-2474 to access the DRC.

EDEP 824: Tentative Course Organization and Schedule

DATE	TOPIC	ASSIGNED READING	WORK DUE
August 31	Review syllabus Introduction and Overview		
September 7		No classes-Labor day	
September 14	Introduction to SPSS Variables	Unit 1 (Lessons 1-4): Getting Started with SPSS Unit 2 (Lessons 5-11): Creating and working with data files	Presentation of Proposals Data Coding Data Entry
September 21	APA Style (Sixth Edition) Syntax	APA writing guidelines Unit 3 (Lessons 12-15): Working with data *Statistical Computing Seminars: Beyond Point and Click: SPSS Syntax.* Available on the Web at:http://www.ats.ucla.edu/stat/spss/seminars/spss_syntax/default.htm Blaikie (2003)-Chapter 1	Creating Syntax Presentation of empirical research article
September 28	Descriptive Statistics Qualitative Analyses	Unit 5 (Lessons 19-21): Creating variables and computing descriptive statistics *Annotated SPSS Output- Descriptive Statistics.* Available on the Web at: http://www.ats.ucla.edu/stat/spss/output/descriptives.htm *Annotated SPSS Output - Correlation.* Available on the Web at: http://www.ats.ucla.edu/stat/spss/output/corr.htm Blaikie (2003)-Chapter 4	Quantitative Creating Variables

	Qualitative Data Reduction and Data Reconstruction	Heath (1997) Creswell (1998)-Chapter 8	Qualitative Coding and development of categories
October 5	Assessing Reliability and Validity: Developing Robust Measures	Unit 9 (Lessons 36-38): Scaling Procedures http://ccnmtl.columbia.edu/projects/qmss/measurement/validity_and_reliability.html Creswell (1998)-Chapter 8 Blaikie (2003)-Chapter 7	Tables /Themes Presentation of empirical research article
October 12 October 13	t tests Univariate and multivariate Analysis of Variance	No classes on October 12 Monday Classes will be held on Tuesday October 13 Unit 6 (Lessons 22-30): t tests, ANOVA and MANOVA	Reporting results-draft Presentation of empirical research article
October 19	Regression and SEM	Unit 8 (Lessons 31-35): Regression Amos Tenko & Marcoulides (2006)	Reporting results-draft
October 26	Interpretation of Results: Quantitative/Qualitative	SEM continued if needed Bem (1987) Creswell (1998) Chapter 9	Presentation of empirical research article
November 2	Interpretation of Results: Quantitative/Qualitative	Bem (1987) Creswell (1998) Chapter 9	Results section
November 9	Discussion Were the Research Questions/Hypotheses Supported?	Creswell (1998) Chapter 9	
November 16	Discussion Relating the Results to Previous Research	Cone & Foster (1993)-Chapter 13	Discussion-Draft

	Studies		
November 23	Discussion Limitations of the research, educational implications and future research	Cone & Foster (1993)-Chapter 13 Creswell (1998)- Chapter 9	
November 30	Preparing research proposals for conference submission and presentation	Formats: http://www.aera.net/ uploadedFiles/Meetings_and_Events/2010 _Annual_Meeting/ 2009AM%20Call%20for%20Proposals.pdf	Discussion section
December 7	Conclusions and submission of proposals	Organizations: www.apa.org/ American Psychological Association: Division 15 Association for Psychological Science http://www.psychologicalscience.org/convention/ and others depending on content	Presentations of Research Conference Proposals
December 14			Final Paper

Readings

Bem, D. J. (1987). Writing the empirical journal article. In M. P. Zanna & J. M. Darley (Eds.), *The complete academic: A practical guide for the beginning social scientist* (171-201). New York: Random House.

Blaikie, N. (2003). Social research and data analysis: Demystifying basic concepts. In *Analyzing quantitative data.* Thousand Oaks, CA: Sage. (Chapters, 1, 4 & 7).

Cone, J.D. & Foster, S. L. (1993). *Dissertations and theses from start to finish: Psychology and related fields*. American Psychological Association. Washington, DC

Creswell, J.W. (1998). *Qualitative inquiry and research design. Choosing among five traditions*. Sage Publications, Thousand Oaks. (Chapters 8 & 9).

Heath, A. W. (1997). The proposal in qualitative research. *The Qualitative Report*, 3 (1) (http://www.nova.edu/ssss/QR/QR3-1/heath.html).

Tenko, R. & Marcoulides, G. A. (2006). A first course in structural equation modeling (2nd edition). Lawrence Erlbaum Associates, Publishers. Chapter 1

Other Recourses

University of California-Los Angeles (UCLA), http://www.ats.ucla.edu/stat/
The site provides links to a wide range of quantitative techniques and applications

Measurement, Quantitative Methods in Social Sciences (QMSS) E-Lessons.
http://ccnmtl.columbia.edu/projects/qmss/meas_about.html Focus on first three sections

Review the following website. Standards for reporting on empirical research in AERA journals.
http://www.aera.net/?id=1480

Rubric

Research Proposal Rubric, Part II

Criteria	Outstanding (4)	Competent (3)	Minimal (2)	Unsatisfactory (1)
Data Analysis and Results • Describe data analysis plan • Present results	Excellent description of appropriate statistical techniques (descriptive, inferential statistics for quantitative research) and/or coding procedures (qualitative research) and expected results.	Adequate description of appropriate statistical techniques (descriptive, inferential statistics for quantitative research) and/or coding procedures (qualitative research) and expected results.	Significant weaknesses in the description of statistical techniques (descriptive, inferential statistics for quantitative research) and/or coding procedures (qualitative research) and expected results.	Appropriate data analysis techniques and or description of expected results were not provided.
Discussion, Limitations and Educational Implications • Discuss findings • Connect findings to prior research • Identify limitations • Discuss implications of findings	Excellent discussion of findings and how they relate to prior research, discus limitations and educational implications of research.	Adequate discussion of findings and appropriate limitations and educational implications. Findings were not discussed in detailed how they relate to prior research and critical limitations or implications were not addressed.	Significant weaknesses in the discussion of findings and of limitations and educational implications. Few were identified and/or were inappropriate.	Discussion of limitations and educational implications was not provided.
Additional Elements				
Use of Peer-Reviewed Research	Contains references to 10 or more relevant empirical studies	Contains references to at least 10, the majority of which are relevant	Contains references to 10 studies but most are irrelevant	Does not include at least 10 peer reviewed studies.
Discussion of the Literature	Clearly spoken, topic-specific jargon are defined, does not rely on quotes from papers; includes quotes strategically where appropriate	Most topic-specific jargon are defined OR inclusion of some lengthy or inappropriate quotes	Overuse of jargon AND quotes that are lengthy or inappropriate	Fragmented and unclear discussion; over reliance on quotes interrupts the flow of the content and leaves little room for student's synthesis
Abstract	Clearly and sequentially conveys the content of paper	Gives a general overview of paper topic, but no sequential elaboration of contents	Does not provide a clear representation of paper contents	Not provided
Writing Style	Paper is coherent, concise and well structured with a clear	Paper is coherent, concise and well structured with a clear	Paper conveys the main points of the topic but additional polish	Paper is incoherent and/or overly wordy with little

	purpose.	purpose and few errors.	is needed	structure or purpose; difficult to appreciate the content
Technical Merit (spelling, grammar, typographical errors)	Error free	A few minor errors	Several errors or incoherent sentences	Numerous errors
Citation of sources	Appropriate citation of sources	A few missing citations	Several missing citations	Lack of citations
Paper guidelines and APA style (e.g., references, levels of heading, margins)	APA guidelines were followed	APA guidelines were followed with a few instances of incorrect formatting and style	APA guidelines were used but there are several instances of incorrect formatting and style.	APA style was not used.