Indiana University of Pennsylvania
Professional Studies in Education
Doctoral Program in Administration and Leadership

ALS 820: DOCTORAL SEMINAR IN RESEARCH

SYLLABUS -- Spring 2013
Saturdays: Feb. 2, Feb. 16, March 2, March 30, April 13
138 Stouffer

INSTRUCTOR

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OFFICE HOURS

The instructor's spring schedule is not finalized so office hours will be announced at a later date but prior to the start of class.

CATALOG COURSE DESCRIPTION

Provides students with the opportunity to acquire, refine, and apply the knowledge and skills to evaluate and design educationally relevant research. Emphasis is on quantitative and qualitative research approaches within educational settings.

REQUIRED TEXTS

APA Manual 6th Edition

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. (4th Ed.). New York, NY: Pearson.

Mertler, C. A. & Charles, C. M. (2010). *Introduction to educational research* (7th ed.). New York, NY: Pearson.

Additional readings may be assigned at least one class period in advance.

INTRODUCTION

In order for a professional educator to be effective, he or she must demonstrate the ability to deal effectively with the myriad of problems that occur in educational settings.

Success in solving problems depends, to a large extent, on one's ability to:

(1) Identify problems and communicate them to others in a clear and concise way.
(2) Understand the nature of the problem and propose solutions in a systematic fashion.
(3) Collect information and generate new knowledge needed for formulating potential solutions to problems.
(4) Evaluate proposed explanations and solutions from a knowledgeable perspective.

These four interrelated abilities constitute the basis for research, not just in education but in any discipline. They are, in abbreviated form, the components of the scientific method.

Because the discipline of education is considered one of the social sciences, it is not surprising that the methods of science have become one of the principle ways by which educators develop knowledge and test ideas. The rigor of the scientific method, its insistence on logic and rationality, and its use of accepted, appropriate and in many cases replicable procedures all combine to provide a powerful tool for the development and testing of knowledge and theories.

However, there are limitations to the scientific method. Not all questions can be answered through this approach and it may fail to fully describe the richness or complexity of human environments. Consequently, it is not surprising that social scientists also use approaches that are not based on the scientific method. Furthermore, research methods developed and refined in other social science fields such as sociology, psychology and anthropology have a profound influence on approaches and methods to educational research.

This course is intended to provide doctoral students with opportunities to acquire, refine, and apply the knowledge and skills necessary for them to be intelligent and critical producers and users of educationally relevant research. This will be done by helping doctoral students to obtain a working knowledge of quantitative and qualitative research methods, so that they may be capable of evaluating existing research and designing research studies in the field of education. The emphases in the course will be on viewing quantitative and qualitative approaches to research as complementary methods and on the application of these complementary approaches within school or educational settings. It is expected that students will complete a first draft of the dissertation proposal in this course, including the statement of the problem, an outline of the literature review, and a description of the methodology including that for the analysis of data. Students will be introduced to personal computer data analysis packages.

GENERAL CLASS POLICIES

Attendance/Participation: Since this course is intended for doctoral students who will be planning their dissertation research, and since a focus of this course is the design of individual research proposals, a significant amount of course activity will be related to students' individual research projects. Lecture/discussion and peer interaction are essential aspects of the course.

Your attendance and participation is expected, required, and valued. Any absence, late arrival or early departure must be communicated to the instructor prior to the absence as soon as it becomes known to the student and be for reasons that are legitimate, unavoidable, and compelling in nature. As the ALS program is accelerated and condensed, each class session represents 20% of the course and an irretrievable loss of learning from lecture/discussion and peer interaction. However,

recognizing that professionals may encounter emergency situations, one absence is permitted under the following conditions: the absence is for the reasons noted above, notification is given, your work in all classes is submitted when due and is of top quality, and you complete all make-up work as assigned for the missed class. Any make-up assignment will be substantive and commensurate with missing 20% of the course. **Missing two classes, or 40% of this course, will result in a grade of "C" or lower depending on the quality of all other work.** If a student must miss more than one class, you should consider not taking this course until it is offered again.

Any absences must be communicated to the instructor (phone or email) prior to the absence, as soon as it becomes known to the student, and be for reasons that are legitimate, unavoidable, and compelling in nature.

- Unexcused Absences, Excessive Lateness, or Excessive Early Departure: No missed work can be made up in the case of an unexcused absence, lateness, or early departure. Students who are in danger of receiving a grade deduction due to excessive lateness or early departure will be contacted by the instructor and reminded of the need to attend the full class period.
- Excused Absences: Please contact the instructor via email prior to the class for information on making up the missed class.
- Students missing class for any reason remain responsible for all information given during the missed class. Please contact a colleague and check the website for copies of handouts, notes, and descriptions of activities.

Policy on late submission of assignments: All assignments must be submitted on time unless prior arrangements have been made with the instructor and lateness is unavoidable due to an emergency situation. If you are unable to attend class, make arrangements to get your assignment to the instructor on the due date. Unexcused late submission of assignments will result in a deduction of 25% per day.

Technology: Please refrain from using cell phones, I-pads, laptops, or any other electronic media during class for non-class related activities. Additionally, please do not make audio or video recordings during class without the permission of the instructor and any involved students. Feel free to use personal technology devices for class-related activities such as taking notes and looking up related material that may contribute to the discussion at hand. If an emergency requires you to make or receive phone calls during class, please leave the room to complete your call.

Students with Disabilities: Disability Support Services (a unit of the Advising and Testing Center) is the primary agent for the provision of access for IUP students with documented physical, learning, or other disabilities. Faculty and staff within the office serve to ensure IUP's program access compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act. Students with disabilities are urged to register with the office. Services provided include, but are not limited to: early registration (when the university needs to provide a service such as a classroom move or assisting with recorded books); equipment loan; test proctoring and reading; note taking; recording of books; NCR paper; liaison with faculty, OVR, and BVS; brailling; and general advising and counseling. Further information may be obtained in

216 Pratt Hall, by calling 724-357-4067 (V/TD), by e-mailing *Advising-Testing@iup.edu*, or on the website *www.iup.edu/advisingtesting* (use the Disability Support Services link).

Academic Integrity Policy: IUP is an academic community within the society at large. All members within this community are expected to accept the responsibility for academic integrity and honesty. Academic dishonesty seriously erodes the quality of educational pursuits and is unacceptable at IUP. The policies and procedures outlined in the Graduate School Catalog have been established to preserve the academic integrity of the university community, while also providing a process that protects the rights of students who allegedly violate these policies. (See Graduate Catalog)

COURSE OBJECTIVES

After completing all course requirements, students will:

- be able to compare and contrast qualitative and quantitative research
- be knowledgeable about the basic concepts and terminology of qualitative and quantitative research methods
- be able to identify the range of research problems and questions that are appropriately addressed using both quantitative and qualitative methods
- be knowledgeable regarding data collection techniques in both qualitative and quantitative approaches to research
- be knowledgeable regarding data analysis techniques in both qualitative and quantitative approaches to research
- be able to evaluate the logical and theoretical bases for research hypotheses
- be able to evaluate the appropriateness of research methods and procedures
- be able to evaluate the appropriateness of analysis techniques for testing research hypotheses and answering research questions
- be able to apply the concepts of research design and analysis to the design of research
- be able to develop testable hypotheses or answerable research questions that are logically derived from theory and/or prior research
- be able to design research procedures (including sampling, data collection, instrumentation design or choice, etc.) to test stated hypotheses or to answer relevant research questions
- be familiar with the use of a personal computer (and relevant software) to analyze qualitative and quantitative data
- be able to analyze and evaluate the appropriateness of research findings and conclusions
- have produced the first draft of a dissertation proposal consisting of the introduction and problem statement, an outline of the literature review, and a description of the methodology

ASSIGNMENTS

For satisfactory course completion, the following requirements must be met:

Class Preparation, and Participation (50 points – 10 points per class)
All students must come prepared for each class and satisfactorily participate in all class activities. Satisfactory preparation includes: doing all the assignments and readings *prior to class*. Students who have not completed all assignments and readings prior to class will not receive credit for the full participation points for that day's class. Satisfactory participation includes contributing substantively to small and large group discussions, remaining attentive and engaged throughout class, and participating in all class activities. All assignments will be used during class and/or handed in for credit towards the participation points.

Mini-Research Assignments (40 points total, 20 points each)
Each student will complete two mini-research assignments. Each assignment will provide hands-on experience with quantitative and qualitative research methods and data collection techniques. Data collected from the mini-assignments will be used for in-class analysis activities. Please bring two copies of each assignment to class (one to hand in and one to use during class). The assignments are formative assessments and no rubric is used. Full credit will be given for satisfactorily completing both assignments. A summary of each assignment is included below. Specific instructions and deadlines are included with the assignment descriptions available on D2L.

Mini- Research Assignment #1: Survey & Interview Construction
Survey: Construct a 7 – 11 item survey on a non-intrusive topic of your choice. Please submit your survey topic to the D2L Dropbox by the deadline provided. While this assignment may (or may not) focus on your preferred dissertation topic, the data and results from it cannot be used in your dissertation without IRB approval. Bring a hard copy of your survey to class.
Your survey should include

- 2 – 3 demographic items
- 1 – 2 Checklist items
- 3 – 4 Likert-scale type items
- 1 – 2 Free response or open-ended items (open-ended items are those questions for which participants provide their own narrative response)

Interview: Determine a non-intrusive topic on which to conduct a 30 – minute interview. Be sure to choose a topic that is personally interesting and lends itself to discussion. Have the interview topic approved by the instructor (via the D2L Dropbox) by the deadline provided. Prepare 12-15 questions to guide your interview. This document is called an interview protocol. Your interview protocol should include at least twelve open-ended questions. Your survey and interview may be on similar or different topics. Please see the assignment description for additional information.

Mini-Research Assignment #2: Survey & Interview Data Collection
Survey: Administer the survey you completed in Mini-Research Assignment #1 to at least 10 but not more than 12 adults who are already your acquaintances. I strongly encourage you to use a free online survey tool that allows survey responses to be directly entered into a spreadsheet. Bring all survey responses to class in an electronic format (i.e. excel spreadsheet) that can be downloaded into SPSS. An example will be provided

Interview: Using the protocol you developed in Mini-Research Assignment #1, interview one adult who is already a friend, acquaintance, or family member. The interview should be recorded and last approximately 30 minutes. Following the interview, listen to the recording and write a 1-2 page summary of the interview. In addition, identify what you consider to be the most interesting part of the interview and type a 2-page (verbatim) transcript of that section of the interview. Bring the summary and 2-page transcript (hard copy and electronic copy) to class. Use a pseudonym in typing your summary and interview transcript to protect the anonymity of your participant. While this assignment may (or may not) focus on your preferred dissertation topic, the data and results from it cannot be used in your dissertation without IRB approval. Please see the assignment description for additional information.

Research Proposal Presentation (15 points)
Each student will make a 15 minute oral presentation to a small group on his/her proposal. A rubric is provided.

Final Assignment and Key Assessment: Dissertation Research Proposal (50 points):
Satisfactory completion of a term paper that will take the form of the doctoral dissertation research proposal. The research proposal will be prepared in accordance with the editorial standards elaborated in the Publication Manual (6th Edition) published by the American Psychological Association, and will include the following:

a) statement of the problem or research question.
b) an outline of a review of the relevant theoretical and empirical literature.
c) statement of experimental hypotheses and/or research questions based on that literature review.
d) description of a methodology that will be followed to test the hypotheses or answer the research questions.
e) description of the data to be collected.
f) description of how the data will be analyzed, including a description of the statistical analysis methods if applicable.
g) list of references for all sources cited and/or used in the preparation of the paper.

Please include a minimum of the following sections in your paper. You may use additional section headings (i.e. Introduction, etc.) and change the order in which these sections appear in your paper.

- Problem/Purpose Statement
- Theoretical Position
- Operational Definitions and Terms
- Hypotheses/Research Questions
- Literature Review
- Research Design
- Limitations
- Summary

RESEARCH REPORT SCORING RUBRIC	1	2	3	4	5
Problem/Purpose statement a. Is the problem stated clearly and concisely? b. Is the problem researchable? c. Has the researcher made a compelling case for the significance of the problem? d. Does the problem have sufficient practical value?					
Theoretical Position a. Is a theoretical position clear? b. Are the driving beliefs or perspectives framing the study sufficiently articulated? c. Is the theoretical position sufficiently supported by the literature? d. Do the research hypotheses/questions flow logically from the theoretical position?					
Operational Definitions and Terms a. Are all variables/unfamiliar terms operationally defined so that a person unfamiliar with the research topic can understand them? b. Are the definitions sufficiently unambiguous?					
Hypotheses/Research Questions a. Are the experimental (and null) hypotheses/research questions stated clearly? b. Is each hypothesis/research question supported by literature? c. Are the hypotheses/research questions appropriate for the research design? d. Are the hypotheses/research questions consistent with the stated problem or purpose?					
Literature Review a. Is the context of the problem clear? b. Are relevant theories and research cited to support the hypotheses? c. As appropriate, have you included literature that is in opposition to your position? d. Are the theories and research cited relevant to the variables/research questions used?					
Research Design a. Is the design adequate to test the stated hypotheses/respond to the research questions? b. Is the proposed sample adequate and sufficiently representative? c. Are there any sources of bias that are not controlled or explained? d. Does the research design allow for the ethical treatment of human subjects?					
Statistics (quantitative) a. Are the descriptions clear for all statistical tests that are planned? b. Are the statistical tests appropriate and relevant to the stated hypotheses? c. Are the proposed methods sufficient for the research problem and questions? **Trustworthiness (qualitative)** a. Are the proposed research methods clearly described? b. Are the proposed research methods appropriate and relevant for the purposes of the study? c. Are the proposed methods sufficient for the research problem and					

questions? d. Has the researcher planned to ensure rigorous qualitative research through practices such as: triangulation, establishing an audit trail, member checking, peer debriefing, or prolonged engagement?					
Writing and Organization a. Is the title of the study descriptive? b. Has the researcher disclosed and adequately addressed any ethical conflicts (i.e. research with vulnerable populations, doing research at her/his workplace, etc.)? c. Are headings used well to help readers navigate through the document? c. Is the paper free of grammatical errors and typos? d. Is the paper clearly and concisely written without excessive jargon? d. Is the paper written in APA 6th edition style?					
Limitations and Summary a. Are the limitations of the study stated clearly? b. Has the researcher considered limitations due to the methodological approaches used? c. Has the researcher considered limitations based on the sample or sampling techniques? d. Are there significant limitations that the researcher fails to identify? e. Has the researcher included a brief summary of the main points in the chapter?					
References a. Are all citations listed in the reference list? b. Is the reference list complete and up-to-date? c. Are the majority of the references scholarly and reputable? d. Is APA style used correctly throughout?					

Rubric Scale:

5 = Exemplary: All criteria were met as described and in some cases criteria were exceeded
4 = Accomplished: All criteria were met as described
3 = Satisfactory: Most criteria were met as described; there is evidence that real effort was made to meet criteria.
2 = Developing: Some criteria were met as described; there is evidence that effort was made to meet criteria.
1 = Few criteria were met as described: there is evidence that little effort was made to meet criteria
0 = Unacceptable: Criteria were not met.

GRADE COMPUTATION

Final course grades will be determined from a point system based on the combination of grades obtained from each assignment, weighted as follows:

Mini-assignments	40	A = 93% - 100%
Presentation	15	B = 85% - 92%

Class Prep & Part.	50	C = 77% - 84%
Proposal	50	F = less than 77%
TOTAL	**155**	

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TENTATIVE COURSE SEQUENCE

Feb. 2	Creswell Ch 1. – 2, including sample articles on pp. 29 - 56 Mertler & Charles Ch. 1 – 3, 6, 8 Introduction to the Course: Research Methods and Traditions Research Topics and Research Problems Research Questions	Dissertation Explorations Assignment Due
Feb. 16	Mertler & Charles Ch. 7, 10 – 11 Creswell Ch. 4 – 5, 7 Survey Research Variables Hypotheses Scales of Measurement Quantitative & Qualitative Methods	Mini-assignment #1: Survey and interview questions
March 2	Mertler & Charles Ch. 12 Creswell Ch. 6, 8 Qualitative Analysis Triangulation Descriptive & Inferential statistics Type I & Type II Errors SPSS Lab & NVivo Demo (Be prepared to login to an IUP computer)	Mini-assignment #2: Interview & Survey Data
March 30	Mertler & Charles Ch. 13 – 14 Creswell Ch. 9 Mixed Methods Research Reliability Statistical Tests Experimental Research Internal & External Validity	Presentations
April 13	Creswell Ch. 1 (Review pp. 22 – 24 Ethics section only) and Ch. 17 Mertler & Charles Ch. 15 - 16 Research Ethics Action Research Evaluation Research Institutional Review Board Applied Research Lab Visit (tentative)	Dissertation Research Proposals Due Today. Please bring a self-addressed, stamped envelope for the timely return of your proposal.