# COUN 635: Research Methods and Program Evaluation in Counseling Old Dominion University Dept. of Educational Leadership and Counseling Fall 2007

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Office Hours: Tuesdays 12pm-2pm and by appointment

Graduate Credit: 3 hours

Class: Wednesdays, 7:10pm-9:50pm

CRN 11731

1009 Constant Hall

## **Required Texts:**

McMillan, J. H., & Schumacher, S. (2006). *Research in education: Evidence-based inquiry* (6th ed.). Boston: Pearson/ Allyn & Bacon.

American Psychological Association. (1994). *Publication manual of the American Psychological Association* (4th ed.). Washington, DC: Author.

## **Course Description/Rationale:**

This course is an introduction to qualitative and quantitative research and program evaluation. The course will focus on understanding research and evaluation methods that counselors and educators will need to understand and use empirical studies presented in the literature to improve their practice and to participate in research and evaluation projects in their professional settings.

#### **Course Format:**

This course is experiential and involves an active lecture-discussion format. It will involve lecture, class and small group discussions, reading and writing assignments, and student presentations. There will be substantial emphasis on learning to access and utilize the research literature, to critically analyze the results of published research, to design research and evaluation studies, and to translate research into practical applications in professional contexts.

## **Course Goals and Objectives:**

Upon successful completion of the course, students will:

- Consider himself/herself a knowledgeable scientist-practitioner in research and evaluation studies;
- Understand, interpret, and apply results of research and evaluation studies to his/her professional pursuits;
- Undertake the design, conduct, and interpretation of a research or evaluation study;
- Understand the ethical issues and practices important in the conduct of research, particularly with human subjects;
- Communicate effectively both orally and in writing about research-related issues.

These general goals will be addressed through the following objectives:

- Identify and describe different types of research approaches and designs.
  - o Distinguish between experimental and descriptive approaches to research.
  - o Distinguish between quantitative and qualitative research approaches.
  - o Generate examples illustrating various types of approaches and designs.
- Read, summarize, and critique research reports.
  - o Recognize different types of research reports.
  - o Discriminate between primary and secondary sources.
  - o Identify and summarize different sections of a research report.
- Understand and generate research questions and hypotheses.
  - Operationally define variables and constructs.
  - o Distinguish between manipulated and measured variables.
- Identify and understand sampling and assignment techniques.
  - o Distinguish between populations and samples.
  - o Distinguish between random sampling and random assignment.
  - o Recognize different sampling and group assignment procedures.
  - Describe purposive sampling techniques.
- Identify and describe logical fallacies in scientific thinking.
  - o Define internal validity and identify threats to internal validity.
  - o Define external validity and identify threats to external validity.
  - o Define trustworthiness and identify threats to validity in qualitative research.
- Analyze and interpret simple statistics.
  - o Practice analysis and interpretation of descriptive and simple inferential statistics.
  - o Generate tables and graphs.
  - o Propose data analysis plans for research proposal.
- Describe the reliability and validity of measurement instruments.
  - o Know where to obtain psychometric information.
  - Understand why reliability and validity are essential properties of measurement tools.
- Write a research proposal.
  - Utilize APA manuscript style (5<sup>th</sup> ed.)
  - o Review the literature and write a literature review.
  - Propose a research design.

o Articulate strengths and limitations of the research design.

#### **Course Policies:**

Assignments are due when specified in the syllabus. Late assignments are discouraged. One point per calendar day will be subtracted for late assignments, unless prior approval by the instructor has been secured.

All written assignments must be typed and double-spaced. Cover sheets/title pages do not contribute to the assignment length. Points will be deducted for assignments that are not typed. Simply staple your written assignments; please do not use binders. All written assignments must be in APA format.

Please note that this syllabus provides a general plan for the course. Deviations may be necessary based on the needs of the instructor and the students.

## **Honor Pledge:**

Please review and make sure that you understand the Honor System.

"I pledge to support the Honor System of Old Dominion University. I will refrain from any form of academic dishonesty or deception, such as cheating or plagiarism. I am aware that as a member of the academic community it is my responsibility to turn in all suspected violators of the Honor Code. I will report to an Honor Council hearing if summoned."

I will assume that all work submitted for credit meets the guidelines of the Honor System.

### Accommodating Students with Special Learning Needs:

In accordance with university policy students with documented sensory and/or learning disabilities should inform the instructor so that their special needs may be accommodated.

### **Course Requirements**

1. <u>Class Attendance and Participation.</u> Due to the highly interactive nature of this course, class attendance is strongly encouraged. Students are expected to engage in discussions about readings and other assignments. While it is understandable that occasionally there are circumstances beyond one's control that may cause one to be late to class or leave class early, excessive tardiness and leaving class early is not acceptable. The instructor reserves the right to deduct one percentage point per missed class, with a letter grade deduction for three or more missed classes.

Students must activate and use their ODU student email accounts. You will be responsible for checking your ODU email and BlackBoard accounts regularly during the semester. Most class

handouts are only available through BlackBoard. Thus, it is important that you ensure that your account is working and that you check your account before each class. BlackBoard can be accessed at <a href="http://blackboard.odu.edu">http://blackboard.odu.edu</a>.

Read assigned chapters and additional readings according to the course schedule. Participate actively in class discussions and activities. You will be asked to integrate and apply the ideas expressed in the required readings and class discussions.

- 2. **Research Article Critique.** Designing a solid research study requires the ability to critically analyze the results of published research. To this end, students are required to read, summarize, and critique a quantitative or qualitative research article in their field. The critique should be 2-3 pages in length. The critique should include the following subsections: (a) description of the rationale for and findings of the study; (b) description of methods used in the study, including strengths and limitations of the methods used i.e., internal and external validity issues; and (c) the degree to which the study contributes to their field. Attach a copy of the article to the critique. (11.14)
- 3. <u>Examinations.</u> There will be two examinations given at the midpoint (10.10) and end of the semester (11.14). The exam will contain a variety of test question formats, including multiple choice, T/F, FITB, matching, and short essay. The exam will cover both readings and lecture. While the intent of the final examination is not to be cumulative, there may be some material introduced in lectures and readings prior to the midpoint of the semester that may inform test items.
- 4. Research Proposal. Students will design an individual research or program evaluation proposal. The assignment will include such activities as selection of the topic, rationale, research questions, literature review, methodology, potential results and its implications, and ethical, methodological, and cultural issues/limitations. Each student will need to complete a proposal: (a) outlining a sound conceptual framework for the study (includes literature review, research questions/hypotheses, rationale) and method section (includes a description of participants, how data will be collected and analyzed); and (b) addressing issues related to the project (e.g., validity, reliability, trustworthiness, ethical and cultural considerations, implications of the study).

There will be some class time devoted to the development of these proposals. There are writing assignments throughout the course to facilitate the completion of a rigorous and thorough proposal. You will rely on a peer in the course to provide feedback for the proposal. Peer comments/edits should be turned in with the final drafts of the assignments. Points will be deducted for assignments turned in without previous peer feedback. Peer feedback must go beyond editorial remarks to include substantial, constructive feedback to help strengthen your proposal. I will also provide feedback on these assignments to further strengthen your proposal. The research proposal should be concise, and you should aim for 15-25 pages. The proposal must strictly adhere to APA Style as outlined in the 5th edition of the publication

- manual (APA, 1994). Instrumentation, observation, and/or interview protocols should be included in the proposal.
- 5. <u>Research Proposal Presentation.</u> During the final class, you will give a presentation of your research proposal. You are encouraged to use visual aides as part of your presentation as applicable. Peer evaluations will be collected and may be used in determining the presentation grade. (12.5)
- 6. <u>Course Evaluation.</u> I value your input on the course in structuring the course throughout the semester as well as in the future. I will solicit your anonymous, typed feedback at the midpoint (10.17) and end of the semester (12.5). Formative and summative course evaluations are located in Appendix A.

Course Evaluation			
	<u>Percentage</u>	<u>Due</u>	
Research Article Critique	5%	11.14	
Examinations	40% (20% each)	10.10, 11.14	
Research Proposal Introduction	15%	10.17	
Research Proposal	30%	12.5	
Research Proposal Presentation	10%	12.5	

A= 90% or above; B= 80%- 89%; C-= 70%-79%; F= below 70%

# TENTATIVE COURSE SCHEDULE

	Topic	Assignments due
Class 1	Introduction to Research	Chapter 1
8.29.07	Review Syllabus	
Class 2	Ethical Issues in Research	Chapters 4,5
9.5.07	Literature Review	ACA Code of Ethics, AERA Ethical
	Educational Research on the Internet	Guidelines
		Appendix A, B
Class 3	Research Design and Program Evaluation	Chapters 2, 12, 17
9.12.07		
Class 4	Research Question	Chapter 3
9.19.07		Bring proposal introduction working
		draft and research questions to class.
Class 5	Quantitative Research Design	Chapters 9, 10
9.26.07		
Class 6	Sampling	Chapter 6, 15
10.03.07	Validity Threats	
Class 7	Examination #1	
10.10.07		
Class 8	Statistics	Chapter 7, 11
10.17.07		Formative Evaluation Due
		Proposed Introduction Due
Class 9	Data Collection I	Chapters 8, 13
10.24.07		
Class 10	Data Collection II	
10.31.07		
Class 11	Research Day	Develop Proposals
11.7.07		
Class 12	Qualitative Data Analysis	Chapter 14
11.14.07		Article Critique Due
11.21.07	Thanksgiving Holiday- No Class	
Class 13	Examination #2	
11.28.07		
Class 14	Research Proposal Presentations	Summative Evaluation Due
12.5.07		

<sup>\*</sup> This syllabus and course calendar is a guide for the course. Changes for due dates, assignments, and lecture topics may be made at the discretion of the instructor. All changes will be provided in writing.

## Appendix A

### Formative Evaluation- DUE October 17

<u>Your ongoing feedback on the course is very important to me</u>, and it will help me with future classes within and beyond this semester. Please provide constructive feedback regarding the strengths and weaknesses of course <u>content and instruction</u>. I am requesting that you type your evaluation to ensure your anonymity.

Please respond to the following in your narrative evaluation. Thanks again for your feedback.

- 1. What, if any, are the strengths of the course content?
- 2. What, if any, are the strengths of the instruction?
- 3. What, if any, are the weaknesses of the course content?
- 4. What, if any, are the weaknesses of the instruction?
- 5. Are there topics that we have not addressed yet- or do not plan to address per the syllabusthat you would like to see?
- 6. What instructional strategy (e.g., lecture, group activities, class discussions, and independent work) is most helpful for you in understanding research methods?

# Summative Evaluation- DUE December 5

Please rate to the left of each item the degree to which you feel each of the course objectives and goals as outlined in the Fall 2006 Syllabus were met/addressed:

(1= objectives were not met at all to 5= objectives were thoroughly addressed)

General Course Goals:		
Consider himsel	f/herself a knowledgeable scientist-practitioner in research and evaluation	
studies;		
Understand, into	erpret, and apply results of research and evaluation studies to his/her	
professional pursuits;		
Undertake the d	esign, conduct, and interpretation of a research or evaluation study;	
Understand the with human sub	ethical issues and practices important in the conduct of research, particularly jects;	
	ffectively both orally and in writing about research-related issues.	
Course Objectives:		
Identify and des	cribe different types of research approaches and designs (Distinguish between	
experimental an	d descriptive approaches to research; Distinguish between quantitative and	
qualitative resea and designs).	rch approaches; Generate examples illustrating various types of approaches	
Read, summarize	e, and critique research reports. (Recognize different types of research	
reports; Discrim	inate between primary and secondary sources; Identify and summarize	
different section	s of a research report.)	
	generate research questions and hypotheses. (Operationally define variables Distinguish between manipulated and measured variables.)	
	derstand sampling and assignment techniques. (Distinguish between	
	samples; Distinguish between random sampling and random assignment;	
Recognize differ	rent sampling and group assignment procedures; Describe purposive sampling	
techniques.)		
Identify and des	cribe logical fallacies in scientific thinking. (Define internal validity and	
•	to internal validity; Define external validity and identify threats to external	
validity; Define	trustworthiness and identify threats to validity in qualitative research.)	
Analyze and into	erpret simple statistics. (Practice analysis and interpretation of descriptive and	
simple inferentia	al statistics; Generate tables and graphs; Propose data analysis plans for	
research proposa	al.)	
	iability and validity of measurement instruments. (Know where to obtain	
	formation; Understand why reliability and validity are essential properties of	

Write a research proposal. (Utilize APA manuscript style (5<sup>th</sup> ed.); Review the literature and write a literature review; Propose a research design; Articulate strengths and limitations of the research design.)

To ensure anonymity, please attach a typed narrative to this sheet that addresses the following questions in consideration of the degree to which feedback from formative evaluations was addressed:

- 7. What, if any, are the strengths of the course content?
- 8. What, if any, are the strengths of the instruction?
- 9. What, if any, are the weaknesses of the course content?
- 10. What, if any, are the weaknesses of the instruction?
- 11. Additional comments?