

# Note:

Course content may be changed, term to term, without notice. The information below is provided as a guide for course selection and is not binding in any form, and should <u>not</u> be used to purchase course materials.



# COURSE SYLLABUS

## **EDCO 810**

#### RESEARCH DESIGN

## **COURSE DESCRIPTION**

A review of the process of developing research designs and conducting primary research. Students will develop a research prospectus that is anchored in current theory and research in the community counseling context which will serve as a basis for their doctoral dissertation proposal.

#### RATIONALE

Counselors are increasingly required to demonstrate the efficacy of their interventions and treatment strategies. Within the helping profession, there is increasing pressure to provide treatments that are evidence-based. It is no longer professionally acceptable for counselors to rely simply on their experience and previous training in a particular theory or approach to counseling to treat specific kinds of clinical problems such as depression, anxiety, and addictions. We are currently in an era of accountability. This accountability also applies to professional Christian counselors, as the profession will face growing demands to demonstrate efficacy. Moreover, the field of Christian counseling and community care makes knowledge claims about human behavior, developmental processes, spirituality and mental health functioning, and the importance of close relationships. If we believe our knowledge claims have practical, real-life applications, Christian academia has a responsibility to demonstrate that these knowledge claims can have practical applications that can be empirically validated. To this end, doctoral level practitioners and academics must be able to appropriately consume the current scientific research such that they can identify potential strengths and weaknesses of research reports and understand how such data can be interpreted and generalized to areas of interests. The purpose of this course is designed to help the student acquire an advanced understanding of research design and statistical techniques necessary to not only understand and consume the scientific literature in and around the field of counseling and community care, but to also produce a high quality doctoral dissertation that meaningfully contributes to the scientific literature.

## I. PREREQUISITE

For information regarding prerequisites for this course, please refer to the <u>Academic Course Catalog</u>.

## II. REQUIRED RESOURCE PURCHASE

Click on the following link to view the required resource(s) for the term in which you are registered: http://bookstore.mbsdirect.net/liberty.htm

#### III. ADDITIONAL MATERIALS FOR LEARNING

A. Computer with basic audio/video output equipment

- B. Internet access (broadband recommended)
- C. Microsoft Word

#### IV. MEASURABLE LEARNING OUTCOMES

Upon successful completion of this course, the student will be able to:

- A. Demonstrate the ability to write a critical review of scientific literature about a particular area of interest and formulate a specific research question with corresponding research hypotheses that will uniquely and meaningfully contribute to the body of scientific knowledge in that area.
- B. To comprehend how research design methods and statistics procedures are used together to address specific kinds of research questions.
- C. To comprehend the spectrum of research design options (ranging from qualitative to true-experimental) and identify which research designs are most appropriate for addressing specific types of research questions.
- D. To identify the most appropriate research design for addressing specific research questions.
- E. To understand the different procedures for selecting participants for research study and identify how these different procedures critically influence various types of validity concerns.
- F. To understand, appraise, and articulate the important conceptual concerns related to selecting both reliable and valid measures in a research study.
- G. To compare the relative value of various statistical methods and procedures used to address specific research hypotheses.
- H. To acquire conceptual tools for analyzing and critically evaluating outcome data not only in terms of statistical significance but also clinical meaningfulness.
- I. To both understand and apply important statistical concepts for evaluating statistical validity in one's own research proposal as well as in published research articles.
- J. To both delineate and distinguish between different types of validity (internal, external, construct, and statistical conclusion) and appraise research studies considering their relative strengths and weaknesses with respect to each type of validity.
- K. Demonstrate the ability to describe, analyze, and critically evaluate published, peer-reviewed scientific research studies in terms of their relative strengths and weaknesses with respect to the four types of validity described above.
- L. To evaluate research findings considering the Christian worldview and biblical teachings. Moreover, the student will show the ability to theorize and reflect on how research findings may be integrated into a Christian worldview.
- M. The student will understand and recognize core ethical considerations involved in conducting research with human subjects.

#### COURSE REQUIREMENTS AND ASSIGNMENTS

## A. Course Requirements Checklist (10 pts)

After reading the Course Syllabus and <u>Student Expectations</u>, the student will complete the related checklist found in Module/Week 1.

#### **B.** Discussion Board Forums

All students are required to subscribe to and participate in course discussion boards. These boards will be a place for students to post questions, and other students and the instructor will respond to posts.

#### C. CITI Training (100 pts)

Students will complete CITI training, which is an online training course on ethics in research. To complete training, follow the instructions on this website: <a href="http://www.liberty.edu/academics/graduate/irb/index.cfm?PID=27730">http://www.liberty.edu/academics/graduate/irb/index.cfm?PID=27730</a>.

CITI training allows users to select which subjects to complete, and students only need to complete the social and behavioral researchers' sections for this course. If students have previously completed CITI training within the last two years, they do not need to complete it again if they submit proof of completion.

## D. Article Notes (100 pts)

Identify an area of interest and carefully acquire and read a minimum of 25-30 different peer-reviewed articles relating to this topic. Articles must be relatively recent (last 10 years). Notes must include a citation and a few sentences to a paragraph of notes for each article. Be careful to only cite sources of original research, and do not reference information that is presented in an author's literature review. (If you read information in a literature review that you would like to include, look up the citation and find the original research.)

## E. Outline of Literature Review (100 pts)

Students will construct an outline for their Literature Reviews. These outlines must be thorough and include citations and descriptions of the articles they reviewed.

## F. Literature Review Draft (100 pts)

Students will submit a draft of their final Literature Reviews. Drafts must follow all the instructions for the Literature Review (see below), and they must be submitted as complete papers.

#### G. Method Draft (100 pts):

Students will submit a draft of their final Method Papers. Drafts must follow all the instructions for the Method Paper (see below), and they must be submitted as complete papers.

## H. Literature Review – Final (100 pts)

The paper must contain the following elements, using current APA style:

- 1. Title page
- 2. Abstract
- 3. Review of Literature

Both summarize and critically evaluate the current literature on the topic. Create within the summary an argument for why this topic is important and the issues and new research needs to address. This must be written in a research-scientific format, as if it is to be submitted to a journal for publication.

This review will serve as the basis for your future research interests. For a sufficient overview of the literature, your review must be 15-20 pages of empirically-based, critical writing. Your review must:

- 1. Summarize the research in a logical, sequential manner.
- 2. Make a case for why additional research needs to be conducted to fill important gaps in scientific literature.
- 3. Clearly identify the research questions that should be addressed.

## I. Method Final (100 pts):

You will write a 5-7-page proposal related to your population.

- 1. Participants you would recruit and how would you recruit them;
- 2. Describe your measures (How will you operationalize and measure your core constructs and principles?);
- 3. Describe your dependent variables, independent variables, and covariates (if applicable);
- 4. Identify what types of statistical procedures you would use and why.
- 5. Address issues related to internal and external validity. Do not just name threats (e.g., history or maturation), but specifically describe how each threat is relevant to this study. Also, address statistical validity issues which should include concepts of Type I and Type II errors, power, and effect size. If an outcome study, discuss clinical significance.

## J. Exams (300 pts; 150 pts each):

Students will complete two written exams. Each exam will consist of six questions, and students will select five questions to write answers for. Answers must be thorough, and they must be submitted in the form of a current APA formatted paper (with citations).

#### V. COURSE GRADING AND POLICIES

#### A. Points

Course Requirements Checklist	10
Discussion Board Forums	0
CITI Training	100

Article Notes		100
Outline of Literature Review		100
Literature Review Draft		100
Method Draft		100
Literature Review – Final		100
Method Final		100
Midterm		150
Final Exam		150
	Total	1010

#### B. Scale

$$A = 940-1010$$
  $A = 920-939$   $B = 900-919$   $B = 860-899$   $B = 840-859$   $C = 820-839$   $C = 780-819$   $C = 760-779$   $D = 740-759$   $D = 700-739$   $D = 680-699$   $E = 0-679$ 

## C. Style Guidelines

All assignments for this course are to be formatted in accordance with the APA manual. Supplemental writing aids are available via the Online Writing Center.

#### D. Extra Credit

No additional "for credit" assignments will be permitted beyond those given in the course requirements stated above.

## E. Course Changes

Course requirements are subject to change by the administration of the University at any time with appropriate notice.

## F. Disability Assistance

Students with a documented disability may contact Liberty University Online's Office of Disability Academic Support (ODAS) at <u>LUOODAS@liberty.edu</u> to make arrangements for academic accommodations. Further information can be found at <u>www.liberty.edu/disabilitysupport</u>.



# COURSE SCHEDULE

# **EDCO 810**

Textbooks: Hayes, *Introduction to Mediation, Moderation, and Conditional Process Analysis* (2013). Hepner et al., *Research Design in Counseling* (2015).

Warner, Applied Statistics (2012).

MODULE/ WEEK	READING & STUDY	Assignments	POINTS
1	Reading\Review: Hepner et al Chapter 1, 2, & 3	Course Requirements Checklist Class Introductions Module 1 Questions and Clarifications DB CITI Training	10 0 0 100
2	Reading\Review: Hepner et al Chapter 4 Warner - Chapter 5 & 6	Article Notes Module 2 Questions and Clarifications DB	100
3	Reading\Review: Hepner et al Chapter 7 & 8 Warner - Chapter 13 & 17	Outline of Literature Review Module 3 Questions and Clarifications DB	100
4	Reading\Review: Hepner et al Chapter 11, 12, & 14	Literature Review Draft Midterm Module 4 Questions and Clarifications DB	100 150 0
5	Reading\Review: Hepner et al Chapter 13, 18, & 19 Hayes – 1, 2, & 3 Warner – 7, 9, & 10	Method Draft Module 5 Questions and Clarifications DB	100
6	Reading\Review: Hayes – 4, 5, & 6 Warner – 11, 12, & 14	Literature Review – Final Module 6 Questions and Clarifications DB	100
7	Reading\Review: Hayes – 7 & 8	Method Final Module 7 Questions and Clarifications DB	100
8	Reading\Review: None	Final Exam	150
Total		1010	

**NOTE**: Each course module/week begins on Monday morning at 12:00 a.m. (ET) and ends on Sunday night at 11:59 p.m. (ET). The final module/week ends at 11:59 p.m. (ET) on **Friday**.