

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 not be used to purchase course materials.

COURSE SYLLABUS

EDUC 815

QUANTITATIVE METHODS OF RESEARCH

COURSE DESCRIPTION

This course is designed for those planning to write a dissertation. An examination of quantitative designs for educational research topics will be considered. These are: Developing a research problem, Reviewing the Literature, The Hypothesis, Descriptive Statistics, Sampling and Inferential Statistics, Tools of Research, Validity and Reliability, Experimental Research Designs, Ex Post Facto Research, Correlational Research, Survey Research, Guidelines for Writing a Quantitative Research Proposal, and Interpreting and Reporting Results of Quantitative Research.

RATIONALE

This course is necessary to prepare the candidate for the process of writing the required proposal and dissertation within the SOE Doctorate of Education program. The Ed.D. program requires the presentation of a proposal for research as a first step in the process of dissertation writing. This course gives the candidate the specific knowledge, skills, and practice needed to write a successful quantitative doctoral dissertation proposal.

I. PREREQUISITE

For information regarding prerequisites for this course, please refer to the [Academic Course Catalog](#).

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. Blackboard [recommended browsers](#)
- D. Microsoft Office

IV. MEASURABLE LEARNING OUTCOMES

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

- A. Identify the steps in the dissertation process for Liberty University School of Education.

- B. Explain ethical, legal, and human relations in planning and conducting research.
- C. Define quantitative research and identify the distinguishing characteristics of quantitative research.
- D. Define procedures for reviewing research literature, sampling, selecting and administering tests, and other measurement devices.
- E. Identify concepts and procedures relating to descriptive research, causal-comparative research, correlational research, experimental research, and case study research.
- F. Identify statistical techniques appropriate for analyzing data from different research designs.
- G. Critique peer-reviewed journal articles and quantitative case studies for research design.
- H. Write a brief literature review, demonstrating scholarly writing skills including acumen, clarity, and conciseness.
- I. Create a research plan that addresses a gap in the educational literature.

V. COURSE REQUIREMENTS AND ASSIGNMENTS

- A. Textbook readings and lecture presentations
- B. Course Requirements Checklist
After reading the Course Syllabus and [Student Expectations](#), the student will complete the related checklist found in Module/Week 1.
- C. Discussion Board Forums (2)
Discussion boards are collaborative learning experiences. Therefore, the candidate will complete 2 Discussion Board Forums in 2 parts: 1) the posting of a thread in response to the stated prompt and 2) the posting of at least 2 replies to his/her classmates' threads. The thread must be approximately 400 words with at least 2 cited references and 1 biblical principle integrated. Each of the replies must be approximately 200 words with at least 1 cited reference. The threads and replies must be in current APA format, must demonstrate critical analysis and synthesis, and must be both concise and substantial in nature. (MLO: B, D)
- D. Dissertation Process Quiz
The candidate will first explore the Dissertation Guide Website and the Dissertation Portal. Then, the candidate will complete a quiz on Blackboard. The quiz will be open-book/open-notes, contain 7 multiple-choice and true/false questions, and have a 2-hour and 45-minute time limit. Questions about the process can be posted in the Logistics Discussion Forum on the SharePoint Dissertation Portal. (MLO: A)
- E. Plagiarism Awareness Quiz
The candidate will acknowledge his/her understanding of plagiarism and the consequences of plagiarism in the course via a quiz. The quiz will be open-

book/open-notes, contain 3 multiple-choice questions, and have a 2-hour and 45-minute time limit.

F. Institutional Review Board (IRB) Quiz

The candidate will acknowledge his/her understanding of the Institutional Review Board's guidelines and procedures via a quiz. The quiz will be open-book/open-notes, contain 10 multiple-choice and true/false questions, and have a 2-hour and 45-minute time limit. (MLO: B)

G. APA Quiz

The candidate will complete a 10-question quiz on current APA formatting. The quiz will be open-book/open notes and have a 1-hour time limit. (MLO: H)

H. Research Plan (6)

Working in a group, the candidate will develop a research plan outlining a quantitative research study that is both empirically and practically significant. The Research Plan must meet the provided criteria and must be in current APA format. During specified modules/weeks, progress updates of the assignment will be submitted to demonstrate advancement with the assignment. (MLO: B, D, E, F, H, I)

I. Article Critique Worksheets (5)

The candidate will complete a critical analysis of 5 assigned articles. Using the provided Article Critique Worksheet, the candidate will critique the articles, identify research limitations of the articles, and reflect on the gaps and limitations of the future research in the article reviewed. (MLO: C, F, G)

J. Quizzes (5)

Each quiz will cover the Reading & Study material for the module/week in which it is assigned. Each quiz will be open-book/open-notes, contain 20 multiple-choice questions, and have a 1-hour and 30-minute time limit. (MLO: C, E, F)

K. Final Exam

The candidate complete a Final Exam that will cover the Reading & Study material for all of the modules/weeks. The exam does not have a time limit, and the exam will be completed in a document. (MLO: B, D, E, F, H, I)

VI. COURSE GRADING AND POLICIES

A. Points

Course Requirements Checklist	10
Discussion Board Forums (2 at 50 pts ea)	100
Dissertation Process Quiz	10
Plagiarism Awareness Quiz	10
Institutional Review Board (IRB) Quiz	20
APA Quiz	10
Research Plan Updates (6 at 60 pts ea)	360

Article Critique Worksheets (5 at 20 pts ea)	100
Quizzes (5 at 40 pts ea)	200
Final Exam	190
Total	1010

B. Scale

A = 960–1010 A- = 940–959 B+ = 920–939 B = 900–919 B- = 880–899
 C+ = 860–879 C = 840–859 C- = 820–839 D+ = 800–819 D = 780–799
 D- = 760–779 F = 0–759

C. Disability Assistance

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

If you have a complaint related to disability discrimination or an accommodation that was not provided, you may contact ODAS or the Office of Equity and Compliance by phone at (434) 592-4999 or by email at equityandcompliance@liberty.edu. Click to see a full copy of Liberty’s [Discrimination, Harassment, and Sexual Misconduct Policy](#) or the [Student Disability Grievance Policy and Procedures](#).

COURSE SCHEDULE

EDUC 815

Textbooks: Gall et al., *Educational Research: An Introduction* (2006).

MODULE/ WEEK	READING & STUDY	ASSIGNMENTS	POINTS
1	Gall et al.: chs. 1–2 1 presentation 2 websites	Course Requirements Checklist Class Introductions Advising Guide Acknowledgement DB Forum 1 Dissertation Process Quiz Plagiarism Awareness Quiz	10 0 0 50 10 10
2	APA Manual Gall et al.: ch. 3 1 presentation 2 websites	DB Forum 2 Institutional Review Board (IRB) Quiz APA Quiz Group Research Plan Update 1	50 20 10 60
3	Gall et al.: chs. 4–5 1 website	Group Research Plan Update 2 Article Critique Worksheet 1 Quiz 1	60 20 40
4	Gall et al.: chs. 6–9 1 website	Group Research Plan Update 3 Article Critique Worksheet 2 Quiz 2	60 20 40
5	Gall et al.: ch. 10 3 presentations 1 website	Group Research Plan Update 4 Article Critique Worksheet 3 Quiz 3	60 20 40
6	Gall et al.: ch. 11 1 website	Group Research Plan Update 5 Article Critique Worksheet 4 Quiz 4	60 20 40
7	Gall et al.: chs. 12–13 3 presentations 1 website	Group Research Plan Update 6 Article Critique Worksheet 5 Quiz 5	60 20 40
8	Gall et al.: Review previous readings	Final Exam	190
TOTAL			1010

DB = Discussion Board

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**.