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. RECOMMENDED RESOURCE PURCHASES


IV. ADDITIONAL MATERIALS FOR LEARNING
A. Computer with basic audio/video output equipment
B. Internet access (broadband recommended)
C. Microsoft Office
D. Software Downloads
   (Silverlight, Adobe PDF Reader, and Flash Player are available to the candidate
   through the Services/Support link on the Course Menu in Blackboard)

V. **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.

VI. **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.

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.

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.

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.

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.

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.

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.

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.

VII. **Course Grading and Policies**

A. **Points**

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Requirements Checklist</td>
<td>10</td>
</tr>
<tr>
<td>Discussion Board Forums (2 at 50 pts ea)</td>
<td>100</td>
</tr>
<tr>
<td>Dissertation Process Quiz</td>
<td>10</td>
</tr>
<tr>
<td>Plagiarism Awareness Quiz</td>
<td>10</td>
</tr>
<tr>
<td>Institutional Review Board (IRB) Quiz</td>
<td>20</td>
</tr>
<tr>
<td>APA Quiz</td>
<td>10</td>
</tr>
<tr>
<td>Research Plan Updates (6 at 60 pts ea)</td>
<td>360</td>
</tr>
<tr>
<td>Article Critique Worksheets (5 at 20 pts ea)</td>
<td>100</td>
</tr>
<tr>
<td>Quizzes (5 at 40 pts ea)</td>
<td>200</td>
</tr>
<tr>
<td>Final Exam</td>
<td>190</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1010</td>
</tr>
</tbody>
</table>

B. **Scale**

D- = 730–749  F = 0–729

C. **LiveText Submission Policy**

Assignments that are to be submitted to LiveText must be submitted there in order to receive credit for them. This includes assignments that are also submitted in Blackboard, including those submitted to SafeAssign.

D. **Disability Assistance**

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

#### EDUC 815

Textbooks:  

<table>
<thead>
<tr>
<th>MODULE/WEEK</th>
<th>READING &amp; STUDY</th>
<th>ASSIGNMENTS</th>
<th>POINTS</th>
</tr>
</thead>
</table>
| 1           | Gall et al.: chs. 1–2  
1 presentation  
2 websites | Course Requirements Checklist  
Class Introductions  
DB Forum 1  
Dissertation Process Quiz  
Plagiarism Awareness Quiz | 10  
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**.