SAMPLE COURSE SYLLABUS

SCHOOL OF EDUCATION GRADUATE EDUCATION

Course Number: EDUC 915 **Course Title:** Quantitative Analysis

I. COURSE DESCRIPTION

This course examines the statistical procedures used in doctoral-level research. An emphasis is placed on understanding the research context, assumptions, notations, interpretations and application of each statistical procedure studied. Univariate and Multivariate analysis, Regression and Multiple Regression analyses, Factor analysis, and Non-parametric statistical procedures. SPSS will be used for statistical calculations.

II. RATIONALE

The doctoral dissertation is the final academic requirement for the EdD. This course provides EdD candidates with specific knowledge and skills needed to write an effective quantitative doctoral dissertation manuscript.

III. PREREQUISITES

EDUC 815

IV. MATERIALS LIST

PLEASE SEE MBS DIRECT FOR UPDATED TEXTBOOK LIST.

TEXTBOOKS

American Psychological Association. *Publication manual of the American Psychological Association* (Current ed.). Washington, DC: Author. ISBN: 9781433805615.

Green, S. B., & Salkind, N. J. (2014). Using SPSS for Windows and Macintosh: Analyzing and understanding data (7th ed.). Upper Saddle River, NJ: Prentice Hall. ISBN: 9780205958603.

Datasets can be found at http://www.pearsonhighered.com/greensalkindSPSS/

Warner, R. M. (2013). Applied statistics: From bivariate through multivariate techniques (2nd ed.). Thousand Oaks, CA: Sage Publications. ISBN: 9781412991346. Datasets available for download: <u>http://www.sagepub.com/warner2e/study/default.htm</u>

SOFTWARE

- SPSS Incorporated. *SPSS Grad. Pack (Stand.)22.0 1 Year (Sw).* 2013. SPSS, Inc. MBS SKU# 1408175. Click on the following link to view the required resource for the term in which you are registered: <u>http://bookstore.mbsdirect.net/liberty.htm</u>
- <u>www.LiveText.com</u> membership: This is a website for portfolio development and the submission of major course assignments. A one-time purchase is required for all candidates in the Education program. ISBN: 9780979663567.

V. MEASURABLE LEARNING OUTCOMES

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

- A. Understand statistical analysis and assumption testing.
- B. Identify appropriate use of parametric and non-parametric statistics.
- C. Calculate data and interpret results related to the following statistical procedures: Two-way ANOVA, ANCOVA, MANOVA, Multiple Regression, Factor Analysis, and other procedures if time allows.
- D. Understand the assumptions, notations, and interpretations associated with the various statistical procedures studied.
- E. Choose the appropriate statistical procedures to solve a research problem.
- F. Describe the logic in selecting a statistical procedure.
- G. Collect, screen, and code data.
- H. Use SPSS to solve statistical problems.
- I. Communicate statistical results in accordance with the APA Style Manual.

VI. COURSE REQUIREMENTS AND ASSIGNMENTS

PLEASE SEE SYLLABUS IN COURSE FOR DUE DATES AND ASSIGNMENTS.

Readings and Instructor Material

The candidate will complete assigned and self-directed readings and view corresponding instructor material.

Pre-Intensive

Course Requirement Checklist: The candidate will complete the CRC as soon as possible. Pre-course attendance will be taken using the CRC and it must be completed immediately in order to stay enrolled in the course.

Blackboard Introduction (Pre-Intensive)

The candidate will post on Blackboard a brief personal biography introducing himself/herself to the class and instructor. This assignment is due three weeks before the intensive.

Instrumentation (Pre-Intensive)

The candidate will write-up an instrumentation section using the quantitative dissertation template as a guide. The document will be submitted via the Blackboard submission link. Bring a copy of your instrument to class. The assignment will be submitted via the Blackboard submission link the first day of Intensive.

Comprehension Questions (Pre-Intensive)

Over a period of three weeks, the candidate will complete the comprehension questions after each of the assigned chapters 1-3 in the Warner text. These questions will be graded based on completeness and submission, not necessarily correctness. Feedback will not be provided until the first day of the intensive. The assignment will be submitted via the Blackboard submission link the first day of the Intensive.

In-class

Classwork (Intensive; in-class)

Attendance for ALL days, ALL day long is required for passing the course. Regular and punctual attendance is expected; do not be tardy in the morning or returning from breaks. Because this class is taught in a residence format where you have come from all distances to this campus to learn and interact with others in a face-to-face format, participation is required. Various class activities will involve peer interaction, group work, group presentations, etc. Participation and discussion are required. Lack of participation and effort or inappropriate interactions with others may result in a grade reduction or failure from the course.

As a major part of the participation grade, the candidate will complete a series of exercises related to each statistical procedure. The instructor will discuss appropriate use of each statistical procedure, their assumptions, and alternative procedures when assumptions are violated. Using guided practice, the instructor will first walk through the statistical procedure; provide a practice exercise; and then assign an exercise. The exercises will be graded on completeness.

Findings Section Presentation (Intensive; in-class)

The candidate will bring to class a copy of his/her proposed instrument(s). Using the proposed instrument, the candidate will setup and input "dummy data" into SPSS. The professor may then manipulate the data (outliers, missing data, inconsistent responses, etc.). The candidate will screen the data and then use the data set for the final project. During the presentation, candidate will explain his/her data analysis and report the results based on the "dummy data."

Post-Intensive

Findings Section Write-up (Post-Intensive)

After completing the textbook readings, attending lectures, participating in discussions, and completing course assignments, the candidate will complete a final assignment. The candidate will be use their proposed instrument and a "dummy" data set and run the appropriate analysis for their proposed nulls. The candidate will identify the correct analysis, complete the analysis, and write an APA results section describing the analysis.

VII. COURSE GRADING AND POLICIES

Assignment	Due Date/Time (EST)	Points	Where
Pre Intensive			
Course Requirement Checklist (This assignment will be used for attendance purposes).	Three weeks before Intensive	10	Bb
Discussion Board Introduction	Three weeks before Intensive	25	Bb
Instrumentation	The first day of Intensive	200	Bb
Comprehension Questions	The first day of Intensive.	75	Bb
Chapters 1, 2, and 3			
Intensive			
Findings Presentation	Last day of class by 4:30 p.m.	200	In class
Participation	Continuous	300	In class
Post Intensive			
Findings Write-up	One week after the intensive, by 11:59 p.m.	200	Bb
Total		1010	

Scale

Late Assignments

Late assignments will only be accepted with prior approval from the instructor. You are to notify the instructor by email of any delay in assignment submissions and request an extension before the assignment is due. If notification of delayed submission is not received before the assignment is due, the assignment will not be accepted. Assignments that are granted an extension will be scored with a 10% deduction daily. Assignments submitted more than one week after the due date will be given a zero. No assignments will be accepted after the last day of the course (when the last assignment is due). No Incompletes (I) due to a candidate's inability to meet the required work for this course will be given in this course. The instructor may offer the chance to resubmit an assignment; however, a 20% point deduction will be given.

VIII. ATTENDANCE POLICIES

There is a stringent attendance policy for intensives. You are required to be in attendance and actively participate every day, all day during the intensive week. Any missed classes will automatically result in final course grade of an "F." After a five minute grace period, candidates will lose 25 points per half hour for tardiness. This course is called an 'intensive' to depict its rigorous nature. You must plan travel to take into account possible delays. It is also advisable to reschedule your course if you become ill.

IX. OTHER POLICIES

Plagiarism

According to the plagiarism policy on academic integrity, plagiarism may result in failing the course. Plagiarism can also result in dismissal from the EdD. program. Plagiarism on any project will automatically result in a zero. Please see the APA manual for information about plagiarism (including self plagiarism) and how it is defined. Additionally, academic misconduct includes not only plagiarism, but academic dishonesty falsification. See *The Liberty Way* for specific definitions, penalties, and processes of reporting.

E-mail Policy

Liberty University gives each candidate an email address. Many candidate s use other email addresses as their preferred address. However, all candidate s need to know that the University and instructor, when sending personal information or general information, will only utilize a candidate's university address. Therefore, candidates are responsible to regularly check for messages at their university e-mail. Additionally, candidate s sending e-mail to the instructor should label it in the following manner: Course, last name, first name (i.e., EDUC919_Doe_John).

File Format

Assignments should all be attached as Microsoft Word documents.

Safeguards

Back up your work. If your work is 'electronically lost,' you are responsible for resubmitting the assignment, and if applicable, accepting the associated late penalty as stated under "Late Assignments" above.

Disability Assistance

Candidate s with a documented disability may contact LU Online's Office of Disability Academic Support (ODAS) at <u>LUOODAS@liberty.edu</u> to make arrangements for academic accommodations.