



CEST6300-HYB Educational Research and Statistics
New Orleans Baptist Theological Seminary
Church Ministry Division
Fall 2023
Monday 6:00-7:50pm with NOLA2U Live
(8/14,8/28,9/11,9/25,10/9,10/23,11/6,11/27)

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Mission Statement

New Orleans Baptist Theological Seminary and Leavell College prepare servants to walk with Christ, proclaim His truth, and fulfill His mission.

Course Description

Students will explore the nature of science as a way of knowing, the scientific method as a means of collecting real-world data in the process of solving problems in church ministries, and statistics as the means of analyzing the meaning of measurements. Students will learn to use quantitative methods to improve leadership and enhance educational, evangelistic, and administrative programs in the local church and related ministries. Successful completion of this course is foundational for doctoral level research and analysis.

Student Learning Outcomes

In order to serve local churches and denominational agencies effectively through Christian Education research, the students will demonstrate . . .

1. . . . understanding of the principles of research design, the structure of a formal research proposal, the various types of research, their corresponding approaches to data gathering, and the appropriate statistical procedure for each type by submitting clear and correct assignments and examinations.
2. . . . appreciation for credible data collection and sound statistical analysis by their willingness to give themselves to assignments, discussions, and exam preparation.
3. . . . skill in solving statistical problems by using statistical procedures in an appropriate and competent manner.

Textbooks

Gravetter, Frederick J. and Larry B. Wallnau. *Statistics for the Behavioral Sciences*. 10th Edition. Boston: Cengage Learning. ISBN: 978-1-305-50491-2

Yockey, Ronald D. *SPSS Demystified: A Simple Guide and Reference*. 4th edition, New York, NY: Routledge Publisher, 2023. ISBN 9780367463212

Students will access the textbook via the Cengage Mindtap online learning module. Instructions for accessing the course and the textbook are found in Canvas. Students will use the course key provided in Canvas to register for the class in Mindtap.

IBM SPSS Statistics GradPack 28. Students may purchase either the Base, Standard, or Premium package. However, we will not use anything more than what the Base package provides. This software may be downloaded as either a 6-month license or 12-month license at this url: <https://onthehub.com/products/a4db50af-41be-eb11-813b-000d3af41938>

Course Teaching Methodology

This course will emphasize a format of teaching and learning that leads to skill-based mastery of vocabulary, concepts, and procedures. This includes weekly reading assignments, writing assignments, lecture, demonstrations, problem-solving assignments, and conceptual examinations.

Units of Study

The topics of study (corresponding to chapters in text) that will be covered in the course are as follows:

Unit 1: Introduction to Quantitative Research

1. Science and Faith
2. Introduction to SPSS
3. Math Review

Unit 2: Descriptive Statistics

4. Measurement Types: Nominal, Ordinal, Interval, Ratio
5. Variability
6. Graphs
7. Correlation Coefficients
8. Reliability and Validity

Unit 3: Statistical Testing and Probability

9. Hypothesis and Research Questions
10. Probability
11. The Normal Curve

Unit 4: Inferential Statistics

12. One-sample Tests of Difference (z-, t-)
13. Two-Sample Tests of Difference (independent t, matched t)
14. One-Way Analysis of Variance (F);
15. Correlation (Pearson r, Spearman rho, Kendall tau)
16. Linear Regression
17. Chi-Square (Goodness of Fit, Test of Independence)

Delivery Format

The course will be delivered via in class and NOLA2U Live on eight specified Mondays, 6:00-7:50 pm (Aug 14, Aug 28, Sep 11, Sep 25, Oct 9, Oct 23, Nov 6, and Nov 27) and on-line through Canvas. Since this is designed as a full semester course, no pre-course assignments will be made. See the course overview for weekly units.

NOLA2U Live

If you are taking this course as a NOLA2U Live student, please note the following attendance policies:

1. The course on the New Orleans campus will be connected synchronously via Bluejeans with Internet students. These courses will require weekly attendance at the stated class meeting times.

2. Students are only allowed to miss the amount of class time specified in the NOBTS attendance policy as stated in the graduate catalog. (See page 184 in the graduate catalog: <https://www.nobts.edu/resources/pdf/academics/GraduateCatalog.pdf>).

3. Technical issues will not be considered a valid reason for missing a class session.

Course Requirements

1. **Homework** Students will complete the homework assignments as assigned each week in Mindtap.
2. **SPSS Exercises** Students will complete the SPSS exercises as assigned in Canvas.
3. **Midterm Exam** A midterm exam will be administered in Mindtap in October. Students must submit the midterm by midnight, October 8.
4. **Final Exam** A final exam will be administered in Mindtap and in Canvas (SPSS portion). Students must submit the final exam by midnight, December 4.

Evaluation of Grade

The student's grade will be computed as follows:

<i>Homework Assignments</i>	<i>40%</i>	
<i>SPSS Exercises</i>	<i>15%</i>	
<i>Midterm Exam</i>	<i>20%</i>	<i>Due October 8 by midnight</i>
<i>Final Exam</i>	<i>25%</i>	<i>Due December 4 by midnight</i>

Technical Assistance

For assistance regarding technology, consult ITC (504-816-8180) or the following websites:

1. Selfserve@nobts.edu - Email for technical questions/support requests with the Selfserve.nobts.edu or My.nobts.edu site (Access to online registration, financial account, online transcript, etc.)
2. Canvas@nobts.edu - Email for technical questions/support requests with the NOBTS Canvas Learning Management System (Faculty/Students/Staff) Canvas.NOBTS.edu.
3. Bluejeanshelpdesk@nobts.edu - Email for technical questions/support requests with the Bluejeans & NOBTS Bluejeans classrooms (On and Off-Campus)
4. TelephoneHelpDesk@nobts.edu - Email for technical questions/support requests with the NOBTS On-Campus Phone system.
5. ITCSupport@nobts.edu - Email for technical questions/support requests in the Flex classrooms and for general technical questions/support requests. If you are not sure who to contact, use this email address!
6. [504.816.8180](tel:504.816.8180) - Call for any technical questions/support requests. (Currently available Mon-Thurs 7:00am-9:00pm & Fri 7:00-7:00pm Central Time)
7. www.NOBTS.edu/itc/ - General NOBTS technical help information is provided on this website.

Attendance Policy

Students are expected to attend and participate in the class sessions. Any student missing more than nine hours may receive an automatic grade of "F" for the course. Three tardies will count as one absence.

Help for Writing Papers at “The Write Stuff”

NOBTS maintains a Writing Center designed to improve English writing at the graduate level. Students can receive writing guides, tips, and valuable information to help in becoming a better writer.

Plagiarism on Written Assignments

NOBTS has a no tolerance policy for plagiarism. Plagiarism in certain cases may result in expulsion from the seminary. See the NOBTS Student Handbook for definition, penalties, and policies associated with plagiarism.

Selected Bibliography

Creswell, John W. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 4th ed. Los Angeles: Sage Publications, Inc. 2014.

George, Darren and Paul Mallery. *IBM SPSS Statistics 26 Step by Step: A Simple Guide and Reference*. 16th Edition. New York: Routledge, 2020. ISBN: 978-1-138-79107-6

Gravetter, Frederick J. and Larry B. Wallnau. *Statistics for the Behavioral Sciences*. 10th Edition. Boston: Cengage Learning. ISBN: 978-1-305-50491-2

Houser, Rick A. *Counseling and Educational Research: Evaluation and Application*, 3rd ed. Los Angeles: Sage Publications, Inc. 2015.

Johnson, R. Burke and Larry Christensen. *Educational Research: Quantitative, Qualitative, and Mixed Approaches*, 5th ed. Thousand Oaks, California: SAGE Publications, Inc. 2014.

Pelham, Brett W. *Intermediate Statistics: A Conceptual Course*. Thousand Oaks, California: SAGE Publications, Inc. 2013.

Salkind, Neil J. and Bruce B. Frey. *Statistics for People Who (Think They) Hate Statistics*. Seventh Ed. Los Angeles: Sage Publications, 2019. ISBN: 9781544381855

Salkind, Neil J. and Bruce B. Frey. *Study Guide for Education to Accompany Salkind and Frey's Statistics for People Who (Think They) Hate Statistics*. Seventh Ed. Los Angeles: Sage Publications, 2019. ISBN: 9781544395975