



**CEST6301 Advanced Educational
Research and Statistics**
New Orleans Baptist Theological Seminary
Church Ministry Division
Spring 2022 Meets on 8 Mondays, 6:00-8:50 p.m.
(Also NOLA2U Live)

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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

This course integrates a quantitative research project with an investigation of multiple regression analysis, multiple discriminant analysis, MANOVA, and factor analysis. Specific attention is given to methods of research, experimental control, validity, behavioral assessment, instrumentation, and measurement techniques, sampling techniques, questionnaire strategies, research proposals, and report development.

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

Hatcher, Larry. *Advanced Statistics in Research: Reading, Understanding and Writing Up Data Analysis Results*. Saginaw, MI: Shadow Finch Media, 2013. ISBN: 9780985867003

Pallant, Julie. *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using IBM SPSS*. London: Open University Press, McGraw Hill Education, 2020. ISBN: 9780335249497.

IBM SPSS Statistics GradPack 28. This software may be downloaded as either a 6 month license or 12 month license at this url: [IBM® SPSS® Statistics 28 GradPacks | OnTheHub | Save on Minitab, SPSS, EndNote, Parallels and More](#)

A calculator and access to Excel is recommended.

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: Review of Quantitative Research

- Probability
- Bivariate Correlation
- Bivariate Regression
- Handling Data

Unit 2: Research Design

- Research Questions and Hypotheses
- Sampling
- Instruments
- Data Collection, Processing, Analysis
- Missing Data

Unit 3: Statistical Testing and Probability

- Parametric Tests (Review)
- Non-Parametric Tests
- Advanced Methods – Multiple Regression, Factor Analysis, Principle Component Analysis

Unit 4: Publication of Research

- Evaluating Journal Articles and Dissertations
- Literature Review
- Methods
- Results
- Discussion

Delivery Format

The course will be delivered via in class and NOLA2U Live on eight specified Mondays, 6:00-8:50 pm (Jan 24, Feb 7, Feb 21, Mar 7, Mar 21, Apr 4, Apr 18, and May 2) and on-line through Blackboard. 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 Web conferencing 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. **SPSS Exercises** Students will complete the SPSS exercises as assigned in Blackboard.
2. **Journal Article Evaluation** Students will find and review a journal article reporting the results of a quantitative study.
3. **Research Project** Students will develop a research project over the course of the semester. The project components will be due throughout the semester (as noted on the course schedule). Project components include: research question, literature review, selection of instrument, data collection, descriptive statistics, analysis of data, and discussion. These components will be assembled over the course of the semester into a journal article suitable for publication.

Evaluation of Grade

The student's grade will be computed as follows:

<i>SPSS Exercises</i>	20%
<i>Journal Article Evaluation</i>	20%
<i>Research Project</i>	60%

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 site (Access to online registration, financial account, online transcript, etc.)
2. BlackboardHelpDesk@nobts.edu - Email for technical questions/support requests with the NOBTS Blackboard Learning Management System NOBTS.Blackboard.com.
3. ITCSupport@nobts.edu - Email for general technical questions/support requests.
4. www.NOBTS.edu/itc/ - General NOBTS technical help information is provided on this website.

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