

FOUN 8111 - Advanced Research Design and Statistics

Summer 2026 Syllabus, Section 01, CRN 30458,

Credit hours: 3

Instructor

Karen H. Larwin, Ph.D.

Professional Qualifications:

Ph. D., Evaluation, Measurement, and Applied Statistics, Kent State University, 2007

Master's, Public Health, CEOMPH, 2021

Master's, Evaluation & Measurement, Kent State University, 2004

Bachelor's, Psychology, Kent State University, 2003

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Communication Expectations:

Communication Expectations: Communication will be returned within 24 hours during the M-F week; grading will be completed within 72 hours during the M-F week.

How to Refer to me:

Dr. Larwin

Course Description

8111. Advanced Research Design and Statistics. An in-depth treatment of the major correlational, experimental, and quasi-experimental research designs and associated statistical analyses, including the design and analysis of surveys and factor analytic techniques. Experience in data analysis using SPSS or other statistical packages. Prereq.: EDAD/FOUN 8104. 3 s.h. Cross listed with EDAD 8111

Course Readings

Group	Title	Author	ISBN
Required	Introduction to Statistics https://onlinestatbook.com/	David Lane	

This is a free online statistics book.

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Topics and Assignments

Week of	Reading(s)	Proposed Topic	Due/To Prepare for Class
5/11	Readings: Chap 1 , pg. 10-62	Reporting Results and Understanding Power	Discussion Board Posts Power Analysis Activity Reading Quiz
5/18	Readings: Chap 2 & 3 pg. 65-163	Visual Data Analysis	Discussion Board Posts Assumptions and Graphs Activity Reading Quiz
5/25	Readings: Chap 7 & 17, pgs. 248-271, 597-615	Non-Parametric Statistics	Discussion Board Posts Non-Parametric Analysis Activity Reading Quiz

6/1	Readings: Chap 10 & 12, pgs. 328-368, 398-446	Differences between two groups; t-tests	Discussion Board Posts T-test Analysis Activity Reading Quiz
6/8	Readings: Chap 11 & 15, pgs. 369-397, 515-575	Differences between more than two groups: F-statistics and ANOVA	Discussion Board Posts ANOVA Analysis Activity Reading Quiz
6/15	Readings: Chap 15, pgs. 515-575	General Linear Models	Discussion Board Posts GLM Analysis Activity Reading Quiz
6/22	Readings: Chap 4 & 14, pgs. 164-184, 461-514	Correlation and Regression	Discussion Board Posts Regression Analysis Activity Reading Quiz

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.