

FOUN 8111 - Advanced Research Design and Statistics

Fall 2026 Syllabus, Section A02, CRN 43309,

Credit hours: 3

Instructor

Karen Larwin

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Public Instructor Information

Instructor Title: Professor

Instructor 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

Instructor Office Location: Beeghly Hall 3401

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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	Lane, D.	https://onlinestatbook.com/
Required	APA Publication Manual	APA	978-1-4338-3216-1

Lane, D. (2016). Introduction to Statistics <https://onlinestatbook.com/>

APA Publication Manual (7th Ed.). (2019). Washington, DC: American Psychological Association.

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
8/24	Chap 1, Lane text, pg. 10-62	Reporting Results and Understanding Power	Discussion Board Posts, Power Analysis Activity, Reading Quiz
8/31	Chap 2 & 3, Lane text, pg. 65-163	Visual Data Analysis	Discussion Board Posts, Assumptions and Graphs Activity, Reading Quiz
9/7	Chap 7 & 17, pgs. 248-271, 597-615	Non-Parametric Statistics	Discussion Board Posts, Non-Parametric Analysis Activity, Reading Quiz
9/14	Chap 10 & 12, pgs. 328-368, 398-446	Differences between two groups; t-tests	Discussion Board Posts, T-test Analysis Activity, Reading Quiz
9/21	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
9/28	Chap 15, pgs. 515-575	General Linear Models	Discussion Board Posts, GLM Analysis Activity, Reading Quiz

10/5	Chap 4 & 14, pgs. 164-184, 461-514	Correlation and Regression	Discussion Board Posts, Regression Analysis Activity, Reading Quiz
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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.