ED_PSYCH 569
Seminar in Quantitative Techniques in Education
(Topics in Multivariate Data Analysis)

ED_PSYCH 569, offered by the WSU Educational Psychology program, aims to provide a conceptual and practical basis to statistical literacy in the education disciplines as well as broad social science contexts. The course focuses on the General Linear Model and its extensions, and the various forms it takes in the multivariate context. The forms of the model will be discussed in relationship to the particular research questions for which they are appropriate. A range of multivariate statistical analysis procedures introduced

Spring 2019 Schedule

4:10 PM – 7:00 PM
Every Thursday
Jan 08 – April 27, 2019

Major Topics

- Matrix algebra
- Multiple linear regression
- Multivariate analysis of variance
- Discriminant function analysis
- Principle component analysis
- Exploratory factor analysis
- Confirmatory factor analysis
- Introduction to structural equation modeling
- Profile analysis: the multivariate approach to repeated measures
- Survival/Failure analysis
- Statistical software packages

About the Instructor

Shenghai Dai, PhD

Dr. Dai has broad background in statistics, psychometrics, and research methods. His research examines the performance and utility of current methodological frameworks that capture students' cognitive development and knowledge growth across various settings. He is interested in applying statistical methods such as missing data analysis, structural equation modeling, and longitudinal data analysis in broad education contexts.

For more information about the courses, please contact Dr. Dai (s.dai@wsu.edu).

College of Education