ED_PSYCH 521
Topics in Educational Psychology
(Data Management & Visualization – Summer 2019)

The topic of ED_PSYCH 521 (Topics in Educational Psychology) offered in Summer 2019 will be in data management and visualization. Using real data from broad social science contexts, this course will seek to illustrate the art and science of cleaning, manipulating, describing, and visualizing data through various project-based data analysis tasks. Both SPSS and R (based on RStudio) will be used in class. No prior experiences in SPSS and R required to register for the course.

Major Topics
❖ Working with SPSS syntax
❖ Introduction to R programming and ggplot
❖ Importing & exporting data of various formats
❖ Coding, computing, and transforming data
❖ Splitting, merging, and aggregating data
❖ Screening and dealing with outliers
❖ Tables, plots, and charts
❖ Handling string variables and text data
❖ Working with date variables
❖ Identifying patterns, trends, and distributions
❖ Coding and handling missing data
❖ Displaying and summarizing relationships

Summer 2019 Schedule
10:00 AM – 12:00 PM
Every Weekday
May 6 – May 31, 2019

About the Instructor
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.

Shenghai Dai, PhD

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