

Upper Division

EDRS 4600 Educational Statistics (4)

This course is built on computer software (SPSS or SAS) to support data description, analysis, and interpretation. Methods include statistical inference, such as t test, ANOVA, correlation, regression, chi square test, and simple multilevel research design. In addition to hands-on training, this course is helpful to students who need to understand statistical results from school settings.

Graduate Courses

EDRS 6600 Educational Statistics (4)

This course covers basic parametric and nonparametric methods that are useful in educational research. The quantitative training has a three-fold focus: (1) when to use each statistical method, (2) how to use the method through computer programming, and (3) how to interpret the results in research literature and computer printout. At conclusion of the course work, students will have a set of useful programs. By replacing numeric parts of each program with their own data in the future, students will be able to conduct statistical analyses, and produce empirical results for dissemination. The academic training is also helpful to students who need to understand statistical results produced by other investigators. In summary, the course design is geared toward preparing students as competent producers and consumers of educational research.

EDRS 6610 Research Design and Analysis in Education (3)

This course focuses on various qualitative approaches, including historical inquiry, descriptive research, quasi-experimental design, single-subject investigation, document analysis, interview planning, observation inventory and ethnographic studies. These research tools are incorporated with statistical methods from EDRS 6600 to facilitate development of student research proposals. Topics of the proposal often reflect characteristics of action research that are relevant to classroom teacher, educational administrators, school counselors and special educators. Prerequisite: EDRS 6600.