

## CTSC 5601ACC

### Utilizing Statistics in Clinical Research – *Accelerated*

**Faculty:** Felicity T. Enders, Ph.D. and Jeremiah Aakre, M.P.H.

**Credits:** 1

**Quarters:** Spring & Summer

**Prerequisites:** CTSC 5600 (prior to or concurrently)

*This course (or CTSC 5601) is required for students in the CTS Postdoctoral Master's and Predoctoral programs.*

#### **Overview**

This hands-on, **accelerated timeline** course introduces statistical software for introductory statistical methods including descriptive statistics, estimation, and inference. Students will gain a better understanding of statistics in clinical research by determining the appropriate statistical methods for a particular study design and type of data, performing the appropriate statistical analysis using the JMP statistical software package, and correctly interpreting the results of the JMP analysis for statistical methods. Modules contain a JMP introduction to the presented statistical method, a two-hour computer lab with worksheet activity, and an online quiz based on the computer lab.

#### **Objectives**

- To identify an appropriate statistical method for a particular study design and type of data
- To perform the appropriate statistical analysis using the JMP statistical software package
- To correctly interpret the results of the JMP analysis for statistical methods

#### **Evaluation**

The final score will be determined by the timely completion of quizzes based on each of the computer labs, a midterm and a comprehensive final exam.

Students will be expected to spend approximately two to four hours outside of class each week on this 1-credit course. There are a total of ten in-person 2-hour long computer labs where students will utilize JMP software and other tools.

Additional online modules related to this topic are available on the [Continuous Professional Development website](#).

For specific dates and times this course is provided, please see the [quarterly detailed course schedule](#).