## Health & Human Performance (HHP)

## HHP 6290. Research Methods in Health and Human Performance. 3 Hours.

Interactive study of importance and process of conducting ethical research in health and human performance professions. Emphasis placed on research design, ethics, collection of data, and the dissemination of results. \*\*COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Identify major research approaches to answering disciplinary questions in Health and Human Performance professions. 2. Apply appropriate methods to develop and investigate research questions in Health and Human Performance professions. Prerequisites: ENGL 2010 (Grade C- or higher) or acceptance to a graduate program or instructor permission. SU.

## HHP 6295. Quantitative Methods in Human Performance. 3 Hours.

This course will examine the basic concepts and techniques of analysis of data in Health and Human Performance research, investigate and apply data analytic techniques which are appropriate for answering research questions and handling varying types data, report and interpret results of data analyses, consider the limitations of statistical techniques, and read and translate results from Health and Human Performance studies. Students will be introduced to the basic principles of statistical computing using analytic software. The course will emphasize statistical theory and techniques for determining bivariable associations, with an introduction to multivariable analysis. \*\*COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Decide and apply the appropriate analysis procedure for each research question; basics of statistical inference (e.g., Type I and Type II error); how to use a statistical software package for analyses. 2. Explain statistical estimation and hypothesis testing concepts; statistical concepts encountered in the health and human performance professions. 3. Apply data management principles in an approach to data; basic software techniques for data analysis. 4. Analyze and interpret results of statistical software procedures; common statistics encountered in health and human performance professions. 5. Create a report of results of statistical analyses for a clinical audience. Prerequisites: MATH 1040 (Grade C- or higher) or acceptance to a graduate program, or instructor permission. FA.

## HHP 6299. Research Non-Thesis Option. 3 Hours.

This course allows students to complete an evidence based research project. Acceptable non-thesis projects include critically appraised topics, interrelated series of research proposals, conducting an empirical study or a problem-based analysis of the literature, each of which require an extensive writing component. \*\*COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Design a substantial evidence-based research project. 2. Demonstrate an understanding of ethical issues associated with research in health and human performance. 3. Analyze data and synthesize research findings. 4. Report research findings in written and verbal forms.