Assessment and Evaluation (AE)

AE 3381. Introductory Statistics. 3 Semester Hours.
This course is designed to be an introduction to the statistical topics listed below. The fact that the topics are presented as bullet points should not be interpreted as suggesting that they are discrete in nature. A conscious attempt will be made to integrate the material into a coherent whole with the overarching purpose being the development of a philosophy of inferential statistics. Topics include: Variance, Statistical distributions, Central tendency, Probability, Hypothesis testing, Power, Statistical assumptions, Correlation and regression, Within-subjects designs, Factorial designs, History of statistics role in studying psychology, Normalized scores, and Non-parametric tests. Additional fee associated with this course. See fee schedule for details at https://www.stmarytx.edu/admission/financial-aid/tuition/.

AE 3385. Advanced Statistics. 3 Semester Hours.
Sampling, hypothesis testing, analysis of variance, multiple regression analysis, multiple discriminate analysis, factor analysis. Hands-on experience in the use of various statistical computer programs. Prerequisite: AE 3381, CJ 3332, CR 3332, MT 2303, PS 3381, or SC 3381. Additional fee associated with this course. See fee schedule for details at https://www.stmarytx.edu/admission/financial-aid/tuition/.

AE 3388. Grant Writing. 3 Semester Hours.
Determining organizational resource needs, identifying grants, writing and revising grants, and submitting grants. Hands-on experience in the use of grant websites.

AE 4387. Test and Measurements. 3 Semester Hours.
Upon successful completion of this course the students will demonstrate theoretical and practical understanding of development and use of measurement instruments used to select and evaluate individuals in industrial, business, government, and academic environments and to assess the nature of the environments themselves.

AE 4389. Applied Program Evaluation. 3 Semester Hours.
This course is designed to introduce students to the process of program evaluation. It assumes that students have introductory-level proficiency in statistics and research methods and challenges them to apply their knowledge in these areas toward solving actual problems in authentic contexts. As such, students will begin the course by learning core concepts related to the various roles of evaluators, identifying stakeholders, methods of building rapport, the process of conducting needs assessments, strategies for creating information feedback loops within existing organizational structures, managing setbacks and obstacles, and report writing. They will then be asked to identify a campus or community organization with whom to work, establish a plan of action that has an appropriate scope and meets an agency-defined need, complete the necessary steps for their project, and submit a professional report. Students will emerge from the course with a basic understanding of the nature of program evaluation and preliminary experience in the field.