

Learning Goal #1: Quantitative Analysis

Definition: Our students will be able to use quantitative techniques such as ANOVA and regression/correlation modeling to understand and evaluate alternatives within the context of business and economics. This learning objective has three components:

- Selection of the appropriate statistical tool
- Computation
- An accurate interpretation and understanding of the results' implications

Selection of the appropriate tool:

1. Understand models and appropriate use of: (choose one) correlation/regression analysis or ANOVA
2. Know data requirements of each tool and underlying assumptions
3. Understand strengths and limitations of each technique

Computation:

1. Use of software packages - the student should be able to use a software package to perform the indicated analysis (ANOVA or regression/correlation), given that the data are already loaded into the software.
2. Format data for analysis - given unstructured data, the student should be able to load the data into a software package so that the data can be analyzed (e.g., there are several ways to organize data for an ANOVA, and some software packages accept data in many ways or only in one way).

Interpretation & Understanding:

1. Understand the reliability of the results
2. Make recommendations based on an accurate assessment of the results
3. Clearly explain the analytical basis for making recommendations regarding alternatives

Procedure: Data are collected from embedded assignments in STAT 601 across all MBA programs. Faculty members in the Decision Sciences Department evaluate the student responses utilizing the rubric for the three components of the goal developed by the Decision Sciences faculty.