Course Number STA-164-01

Course Description

Experimentation is at the heart of the scientific method, both in the physical and social sciences. Not only do experiments validate or disprove existing hypotheses, but often unexpected results lead to the development of new hypotheses and new theoretical understanding. This course will focus on strategies to accelerate the scientific method when experimenting with multiple variables. Specific topics include design options, such as simple comparative experiments, factorials and fractional factorials, and response surface designs, as well as analysis methods such as graphical methods, analysis of variance, and regression models.

Academic Term

21/SP

Instructor

Hoerl, Roger

Location & Meeting Time

O'Brien Center for Collaborative Engagement-117 M/W/F 12:30PM-01:35PM LEC

Credits

1.00

Capacity

20

**Total Students** 

19

**Additional Information** 

http://muse.union.edu/mathematics

Common Curriculum

QMR Quant & Math Reasoning

Academic Department

Mathematics

Field Of Study

Statistics (STA)