Instructor: Dr. Rick Routledge

Prerequisite:
STAT 285 or STAT 302 or STAT 305 or equivalent.

Textbook:
Applied Multivariate Statistical Analysis, 6th ed. by R.A. Johnson and D.W. Wichern. Publisher: Prentice Hall.

Calendar Description:
Introduction to principal components, cluster analysis, and other commonly used multivariate techniques. **Quantitative**

Outline:

1. Principal Components: Identification, use in multivariate regression, using *R* to perform the calculations. (~3 weeks)
2. Cluster Analysis: Survey of commonly used methods, computer calculations, graphical displays, and interpretation of results. (~3 weeks)
3. Other commonly used multivariate techniques subject to interest and expertise of the students and instructor. Examples include the following:
    a. Ordination Techniques: Methodology and survey of common applications, computer calculations. (~2 weeks)
    b. Discriminant Analysis: (~2 weeks)
    c. Canonical Correlation Analysis: (~2 weeks)
4. Student Presentations of Substantive Applications. (~1 week)

Grading Scheme:

Assignments: 20%
Project: 20%
Midterm: 20%
Final: 40%

Grading is subject to change.

Students looking for a Tutor should send an email to stat@sfu.ca with "Tutor Request" in the subject line. Please only include information that you would like forwarded to our tutors mailing list.

Revised September 12, 2013