

SPRING 2015 - STAT 445 D100

APPLIED MULTIVARIATE ANALYSIS (3)*Class Number: 2826 Delivery Method: In Person***COURSE TIMES + LOCATION:**

Mo 12:30 PM – 2:20 PM
AQ 3150, Burnaby

We 12:30 PM – 1:20 PM
AQ 3150, Burnaby

EXAM TIMES + LOCATION:

Apr 25, 2015
8:30 AM – 11:30 AM
WMC 3520, Burnaby

INSTRUCTOR:

Qian Zhou
qmzhou@sfu.ca
778-782-9576
Office: SCK-10548

PREREQUISITES:

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

Description

CALENDAR DESCRIPTION:

Introduction to principal components, cluster analysis, and other commonly used multivariate techniques. Quantitative.

COURSE DETAILS:**Course 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

Assignments	20%
Project	20%
Midterm	20%

NOTES:

All grading is subject to change.

Materials

REQUIRED READING:

Required Text:

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

DEPARTMENT UNDERGRADUATE NOTES:

Students with Disabilities:

Students requiring accommodations as a result of disability must contact the Centre for Students with Disabilities 778-782-3112 or csdo@sfu.ca

Tutor Requests:

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 (contains people external to the University). We accept no responsibility for the consequences of any actions taken related to tutors.

REGISTRAR NOTES:

SFU's Academic Integrity web site <http://students.sfu.ca/academicintegrity.html> is filled with information on what is meant by academic dishonesty, where you can find resources to help with your studies and the consequences of cheating. Check out the site for more information and videos that help explain the issues in plain English.

Each student is responsible for his or her conduct as it affects the University community. Academic dishonesty, in whatever form, is ultimately destructive of the values of the University. Furthermore, it is unfair and discouraging to the majority of students who pursue their studies honestly. Scholarly integrity is required of all members of the University. <http://www.sfu.ca/policies/gazette/student/s10-01.html>

ACADEMIC INTEGRITY: YOUR WORK, YOUR SUCCESS