

SPRING 2019 - STAT 645 G100

APPLIED MULTIVARIATE ANALYSIS (3)*Class Number: 3464 Delivery Method: In Person***COURSE TIMES + LOCATION:**

Tu 4:30 PM – 6:20 PM
BLU 9660, Burnaby

Th 4:30 PM – 5:20 PM
EDB 7618, Burnaby

EXAM TIMES + LOCATION:

Apr 16, 2019
7:00 PM – 10:00 PM
SSCB 9200, Burnaby

INSTRUCTOR:

Joan Hu
joanh@sfu.ca
778.782.6714
Office: SC-K10555

PREREQUISITES:

STAT 302 or STAT 305 or STAT 650 or BUEC 333 or permission of instructor. Open only to graduate students in departments other than Statistics & Actuarial Science.

Description

CALENDAR DESCRIPTION:

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

COURSE DETAILS:**Course Outline:**

1. Multivariate Random Variables and Distributions
2. Inference under Multivariate Normal Distribution
3. Multivariate Linear Regression
4. Principal Components and Factor Analysis
5. Discrimination and Classification
6. Clustering Analysis

Note: This course is being taught in parallel with STAT 445. Where feasible and appropriate, students in STAT 645 will be encouraged to present their research problems involving categorical data as active case studies for the class. Graduate students will also be required to submit a more extensive project related to their specialty.

Grading

Assignments	10%
Project	30%

Midterm

20%

Final

40%

NOTES:

Above 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.

GRADUATE STUDIES NOTES:

Important dates and deadlines for graduate students are found here: http://www.sfu.ca/dean-gradstudies/current/important_dates/guidelines.html. The deadline to drop a course with a 100% refund is the end of week 2. The deadline to drop with no notation on your transcript is the end of week 3.

REGISTRAR NOTES:

SFU's Academic Integrity web site <http://www.sfu.ca/students/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