

**STA4702 - STA5707 Applied Multivariate Analysis SPRING 2011**

**Days/Time/Room:** MW 09:30 AM - 10:45 AM HCB 0312

**Instructor :** Victor Patrangenaru

**Office:** Department of Statistics, room 208

**e-mail:** vic@stat.fsu.edu

**Office hours:** M: 10:55 am - 11:55 am, Tu:5:15 p.m - 6:00 p.m.

**Grader :** Leif Ellingson. e-mail: leife@stat.fsu.edu.

**Textbook:** Applied Multivariate Statistical Analysis, by Richard A. Johnson, Dean W. Wichern, 6th Edition, 2007, Prentice Hall. ISBN-10: 0131877151, ISBN-13: 978-0131877153

**Technology:** SAS, Minitab.

**Prerequisite:** One of STA 5746, 5167, 5207, or 5327

**Course description:** This course is concerned with statistical theory for describing and analyzing multivariate data. Students will be provided with the supporting knowledge necessary for making proper studying of such data, selecting appropriate techniques, and understanding their range of applicability.

Random vectors and associated sampling distributions, multivariate normal distributions, inference about mean vectors and covariance matrices, canonical correlation, principal components, discriminant analysis, cluster analysis, Procrustes analysis and some related techniques are the main topics of our class.

The following chapters from the textbook will be partially covered: 1 - 6, 8, 10 - 12. Time permitting we will also cover partially chapters 7, 9 or other topics in multivariate data analysis. Additional references will be given in class.

**Attendance policy:** Active attendance adds up to 5 bonus points. On the other hand, if you miss without a valid excuse at least 3 times, this extracredit will be lost.

**Grading:** The course grade will be calculated on the basis of homework (30%), a midterm exam (35%) and a final project (35%). The dates of exams will be announced in class. There will be no make ups. Homework will be assigned and partially discussed in class or at office hours.

**Important dates:** January 7, 2011 is the last date for students to add/drop.

February 18, 2011 is the end of seventh week of semester. This is

- the last day to submit form requesting S/U grading or to change S/U option back to regular grade.
- the last day to reduce course load without permission of academic dean. Dean's permission required to drop below twelve semester hours.
- the last day to drop a course without receiving a grade.
- the last day to withdraw from school without receiving a grade.
- the last day to petition to reinstate class schedule canceled for nonpayment of tuition.

**Honor Code:** Students are expected to be uphold the Academic Honor Code as described in the FSU General Bulletin or in the FSU Student Handbook.

**Disclaimer:** This syllabus provides a general plan; deviations may be necessary.