STA4702 - STA5707 Applied Multivariate Analysis FALL 2020

Days/Time/Zoom: TT 11:00 AM -12:15 PM OSB 110

Instructor: Vic Patrangenaru

Office: OSB 208

E-mail: vic@stat.fsu.edu

Office hours/Zoom: TT 10:20 AM - 10:55 AM

Grader : Ms. Seunghe Choi

E-mail: sc17x@my.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. In addition class notes are going to be posted online at www.stat.fsu.edu/ vic/TBA

Acceptable Technology: SAS, MINITAB or MATLAB.

Prerequisite: One of STA 5746, 5167, 5207, or 5327 or equivalent, and their prerequisites

Course description: Any measurable object has multiple aspects to it, that are described by numbers or categories, giving rise to multivariate data. 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: Attendance adds up to 3 bonus points. Active attendance accounts for 5 additional bonus points. If you miss classes without a formal excuse, the extra-credit is lost.

Aug. 29, 2019 is the last day to add courses without academic dean's permission or to drop/add classes and have fees adjusted. For other important dates see https://registrar.fsu.edu/registration_guide/fall/acad

Grading(tentative): The course grade will be calculated on the basis of hw (30%), a midterm exam (30%), the date of which will be announced in class, an undergraduate student final exam (40%) on December 8, 10 a.m.-12 p.m., respectively a graduate student final presentation (40%) on or before December 7.

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.