

ISyE 7405, Fall - 2019
Syllabus
Instructor : A.Shapiro

Textbook: There is no one text book for the class. Class notes will be distributed.

Topics outline:

Multivariate normal distribution

Quadratic forms of normal random variables

Theory of linear models

Wishart distribution

Distribution of sample covariance matrix

Hotelling's T^2 statistic

Principal components

Factor analysis and analysis of covariance structures

Canonical correlations

Linear discriminant analysis

Support vector machines

Grading policy: homework - 5%, one midterm (take home) exam - 45%, final (take home) exam - 50%

Office hours: Monday 11-12am, Friday 11-12am.

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