

STATISTICS 432/512

SYLLABUS

The overall purpose of this course is to discuss theoretical aspects of estimation theory and hypothesis testing procedures. Topics include the Cramér-Rao inequality, sufficient statistics, maximum likelihood theory, transformation theory, order statistics, likelihood ratio tests, non-parametric tests, sequential analysis and linear models theory. It is assumed that each student in the class has taken probability theory to the level discussed in STAT 430, as well as a good introductory course in Statistics, a year of calculus and a good introduction to matrix theory