

M I T Spring 1988 Course Description

18.441 Statistical Inference (A except XVIII)

Prereq.: 6.041 or 18.440 or 18.313

U(2), G(2)

4-0-8

We start with a brief review of some topics in probability, and then continue to study statistics including sufficient statistics, maximum likelihood estimates (MLE), minimum variance unbiased estimates; confidence intervals; hypothesis testing, most powerful test, χ^2 test and nonparametric test. We end the course with an introduction to linear regression model.

In addition to weekly homeworks, there will be one quiz, one mid-term and one final – all will be open book, in-class tests.

Textbook: “Statistical Theory” by Lindgren. Required. “An Introduction to Mathematical Statistics and Its Applications” by Larsen and Marx. Recommended.

Time: Tuesdays and Thursdays 2:30 – 4:00 pm

Instructor: Mai Zhou Rm E40-121; 253-8723 or Rm 2-336; 253-6584