

STA261H1S – Probability and Statistics II – Summer 2013 (web site: UT Portal)

Instructor: Xiaoping Shi SS6026

Office hrs: MW5-6pm

Course Objective: To introduce topics in statistical theory, particularly those in parameter estimation and hypothesis testing, and to prepare you for further study in Statistical Science. Coverage includes chapters 8 and 9 plus a selection of topics from chapters 10-14 of the textbook. Prerequisite: STA 257.

Tutorials

Tutorials begin July 8. Tutorials meet every MW6-7pm at SS2135 same with Lecture room. Assignments will be also posted on the course web site. They will consist of suggested exercises, mostly from the textbook. Bring your solutions to tutorial, along with your questions about these exercises or the related theory and concepts. Expect a quiz on the material as well.

Textbook

Mathematical Statistics and Data Analysis-3rd edition – by John A. Rice

Coverage

Lecture 1: General introduction of probability and statistics and Method of Moments

Lecture 2: Maximum Likelihood Estimation

Lecture 3: Bayesian Inference

Lecture 4: Efficiency and Sufficiency

Lecture 5: Neyman-Pearson Paradigm

Lecture 6: Likelihood Ratio Tests

Lecture 7: Comparing two samples

Lecture 8: Simple linear regression

Lecture 9: Analysis of variance and Matrix algebra

Lecture 10: Multiple linear regression

Lecture 11: Review

Statistics Aid

Your primary source of help with difficulties is your TA in the scheduled tutorial, but additional assistance can be obtained by sending an email to me. Then I would answer common questions in class/ send your email back.

Evaluation

Tutorial quizzes 20% (July 10 & July 31), Midterm Test 30% (July 24) and Final exam 50% (TBD).

Programmable calculators are not permitted on quizzes, test or exam. You must bring your student identification to term tests as well as the final exam.

Missed Midterm Test

There are **no make-up tests**. Should you miss the term test due to illness, you must submit to your lecturer or to SS6018 (Stats office), within one week, completed by yourself and your doctor, **the ‘U of T Student Medical Certificate’**, obtainable from your college registrar, the office of the Faculty Registrar (SS 1006), the StatSci Dept. office, or the Koffler health service. The test’s weight will then be shifted to the final exam. If proper documentation is not received, your test mark will be zero.

Academic Offences

Academic offences are unacceptable, and harm everyone. Offenders are caught, and **sanctions can be severe** and very with examples including a zero in the course with annotation on the transcript for several years; suspension of a year; even expulsion.