STT951
Statistical Inference II

Instructor: Luda Sakhanenko, C441 Wells Hall, (517)432-9795, luda@stt.msu.edu

Office Hours: Fridays 9:00 – 10:00 am and by appointment


Prerequisites: STT 872 and STT 882 or equivalent courses.

Lectures Time and Place: MW 8:30am - 9:50am at A116 Wells Hall

This course continues the discussion of fundamentals of statistical inference. The following topics will be covered:

• Decision theoretic estimation: Minimaxity, admissibility, shrinkage estimators, James-Stein estimators

• Advanced estimation theory

• maximal invariant tests

• multiple testing, FDR, and related methods

• Permutation and rank tests

• unbiasedness and invariance

• Hunt Stein theorem.

Attendance and grading. Attendance is required. The penalty for absence is at the discretion of the instructor and may include deduction of the final grade and failure of the course. The grade in the course will be determined based on the performance in assignments given in class. The following grade scale will be used: 100–85% for 4.0, 85–75% for 3.5, 75–65% for 3.0, 65–60% for 2.5.

* Instructor reserves the right to change the syllabus as circumstances necessitate, it is student’s responsibility to keep up with any changed policies announced in class.

Important Dates
January 12 First Day of Classes
January 16 Open adds end (8:00pm)
January 19 MLK Day (no classes)
February 6 Last day to drop with refund (8:00pm)
March 4 Middle of Semester - Last day to drop with no grade reported (8:00pm)
March 9 - 13 Spring Break (no classes)
May 1 Last Day of Classes

1Updated January 5, 2015