

MATH 452/552: Mathematical Statistics

Fall, 2015

TR 3:30-4:50 Jones 302

Instructor: Larry Leemis

Office: Jones 101C (Phone: 221-2034)

Office hours: Mondays and Wednesdays 10:30-11:50 AM or by appointment

Purpose:

A student completing this course should understand the mathematical foundations underlying classical and modern statistical techniques.

Prerequisite:

Multivariate calculus, calculus-based introductory probability.

Text:

Leemis, L., *Mathematical Statistics* (2015), draft text.

Reference texts:

Casella, George and Berger, Roger (2002), *Statistical Inference*, Second Edition, Wadsworth and Brooks/Cole.

Hogg, Robert V., McKean, Joseph W. and Craig, Allen T. (2005), *Introduction to Mathematical Statistics*, Sixth edition, Prentice-Hall.

Miller, Irwin and Miller, Marylees (2004), *Mathematical Statistics with Applications*, Seventh Edition, Prentice-Hall.

Software:

The Maple and APPL software will be required to solve homework and exam questions. The R software will also be used occasionally for Monte Carlo simulations, graphics, and calculations.

Homework:

There will be a homework assignment distributed at the end of the Thursday class period. It will be due at the beginning of the following Thursday class period.

Grades:

Course grades will be determined by these weights:

Homework	20%
Exam I	25%
Exam II	25%
Final exam	30%

The grading scale for the course will be:

90 - 100 %	A
80 - 90 %	B
70 - 80 %	C
60 - 70 %	D
0 - 60 %	F

Plus and minus grades may be assigned within each range.

