STAT 443/851 2026-2027
Linear Statistical Models T2

Instructor:

Dr. Li Xing
lix491@usask.ca

Course Details

STAT 443 CRN 22248
STAT 851 CRN 23115

Schedule:

Term 2
M, W, F 9:30 – 10:20 am

Tentative Topics:

Some of the topics covered will include:

- A review of linear matrix algebra,
- Distribution theory of the multivariate normal and quadratic forms,
- Theoretical foundations of multiple regression.

Course Objective:

The goal of this course is to provide a rigorous examination of the general linear model using vector space theory, covering concepts such as generalized inverses, orthogonal projections, quadratic forms, the Gauss–Markov theorem and its generalizations, BLUE estimators, non-full rank models, and estimability.

Students Who May Be Interested:

Undergraduate students in Statistics, Mathematics, Computer Science, and Biostatistics.

Graduate students in Statistics, Mathematics, Computer Science, and Biostatistics.

Other Information:

Prerequisite(s): MATH 164 (formerly MATH 264) or MATH 266, STAT 342, and STAT 344 or 345
