Students requiring accommodations as a result of disability must contact the Centre for Students with Disabilities 778-782-3112 or csdo@sfu.ca

Instructor: Dr. Liangliang Wang

Prerequisite:

STAT 285 and MATH 251

Textbook:

Introduction to Mathematical Statistics (7th ed.) by R. Hogg, J. McKean, A. T. Craig. Publisher: Pearson

Calendar Description:

Review of probability and distributions. Multivariate distributions. Distributions of functions of random variables. Limiting distributions. Inference. Sufficient statistics for the exponential family. Maximum likelihood. Bayes estimation, Fisher information, limited distributions of MLEs. Likelihood ratio tests. **Quantitative.**

Outline:

1. Review of Probability and Univariate Distributions
2. Multivariate Distributions
3. Distributions of Functions of Random Variables
4. Limiting Distributions
5. Inference. Sufficient Statistics for the Exponential Family.
6. Maximum Likelihood, Limiting Distributions
7. Bayes Estimation
8. Fisher Information
9. Likelihood Ratio Tests

Grading Scheme:

Assignments 20%
Midterm - 30%
Final 50%

The grading is subject to change.

Students looking for a Tutor should send an email to stat@sfu.ca with "Tutor Request" in the subject line. Please only include information that you would like forwarded to our tutors mailing list.

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