



STAT 330

Introduction to Mathematical Statistics

Summer 2009
Day Course

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. Boxin Tang](#)

Prerequisite:

STAT 285 and MATH 251

Textbook:

Introduction to Mathematical Statistics, 6th ed. by Hogg, Craig, McKean, Pearson Prentice Hall publishers.

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

~~FOUR COURSE CREDIT SCHEME:~~

Homework – 20%

Midterm – 30%

Final 50%, or 80% if you do better on the final than on the midterm