

To: Marv Lee

Grande Prairie Regional College/Yellowhead Consortium

INTRODUCTION TO APPLIED STATISTICS: ST1510

Friday: 10:00 AM-3:00 PM

Fall 1999

Vijaya Krishnan, Ph.D.

TEXT

Moore, David S. (1995). *The Basic Practices of Statistics*. New York: W. H. Freeman & Company.

GRADING

Lab	5%
Assignments	25%
Midterms (2)	30%
Final exam	40%

LECTURE TOPICS AND ASSIGNED READINGS

1. INTRODUCTION

What is Statistics?

2. GRAPHICAL TECHNIQUES FOR DESCRIBING DATA FROM A SINGLE VARIABLE

Ch. 1: 1.1

Defining Variables

Symmetric and Skewed Distributions

Graphic Representations: The Bar Graph and the Pie Chart

3. NUMERICAL TECHNIQUES FOR DESCRIBING DATA FROM A SINGLE SAMPLE

Ch. 1: 1.2 & 1.3

Measuring Central Tendency

Measuring Dispersion

Normal Distributions

4. SAMPLING DISTRIBUTIONS AND PROBABILITY

Ch. 4: 4.1, 4.2, 4.3, & 4.5

Probability

Sampling Variability and Distributions

5. ESTIMATION AND TESTS OF HYPOTHESES: THE ONE-SAMPLE CASE

Ch. 5: 5.1, 5.2, & 5.3

Estimation of a Population Mean

Tests of Significance

6. CROSS-CLASSIFICATION OF DATA

Ch. 8

The Chi-Square Test of Independence

7. CORRELATION AND REGRESSION

Ch. 2: 2.1, 2.2, 2.3 & 2.4

The Scatter Diagram

Method of Least Squares

The Pearson Product-Moment Correlation Coefficient

Interpretations of Regression