

University of British Columbia

STAT 200 - ELEMENTARY STATISTICS FOR APPLICATIONS 2011/12

Course Description: Classical, nonparametric and robust inferences about means, variances, and analysis of variance, using computers. Emphasis on problem formulation, assumptions, and interpretation.

Objective: This course provides the basic statistical toolkit required for the understanding and use of a range of methods for both summarizing and analysing data, giving a platform for further study of applied Statistics. The emphasis in the course will be the application of these methods to real life situations from Science.

Prerequisites: One of MATH 101, 103, 105, 120 or SCIE 001.

Textbook: Moore, D.S., McCabe, G.P. and Craig, B. A. (2012): An Introduction to the Practice of Statistics (7th edition). Freeman.

It would be fine to use the 6th edition of the text. However, we will assign reading and suggested exercises based on the 7th edition. We may not provide correspondence between page and question numbers between the two editions. You may find a copy of both editions in the library for private loan (loan period is 2 hours).

Clickers: We will be using the i>Clicker in lectures. i>Clicker is a response system that allows you to respond to questions posed by instructors during class, and you will be graded on your participation and performance. You are required to purchase an i>Clicker remote for in-class participation.

Labs: We will use Microsoft Excel for data analysis. The labs start the week commencing the second week of class. You will have registered for a lab when you enrolled on the course, and only under exceptional circumstances should you switch from this session to another.

Workshop: There will be weekly drop-in workshops (3 sessions per week) throughout the term where students gather to discuss class materials and work on problems as a group. The workshop will be staffed by course instructors, and is offered in place of regular instructor office hours. This activity is entirely optional. Students interested in coming need not stay for the whole hour. They may drop by at any time they feel like. Please note that students will *not* be evaluated based on their participation and performance in the workshop.

Course Assessment:

Assessment	Date	Percentage
On-line attitude survey	pre and post course	2%
Class participation via i>clicker	in-class	5%
Assignments (3)	Due dates TBA	4% each

Labs	weekly	8%
Midterm	TBA	25%
Final Exam (you must pass the final to pass the course)	To be scheduled by Classroom Services	48%

Policy regarding missing the midterm or final exam:

1. There will be NO make-up exam!
2. Students who miss an exam should notify the instructor prior to (if possible) or immediately after the exam. Students must supply a supporting document (for example, a doctor's note will be sufficient in case of a medical emergency) within one week of the day of exam. Documents submitted after one week time will NOT be accepted and a mark of zero will be given.

Chapters to be covered:

- Chapter 1: Looking at Data - Distributions
- Chapter 2: Looking at Data - Relationships
- Chapter 3: Producing Data
- Chapter 4: Probability: The Study of Randomness
- Chapter 5: Sampling Distributions
- Chapter 6: Introduction to Inference
- Chapter 7: Inference for Distributions
- Chapter 10: Inference for Regression
- Chapter 12: One-Way Analysis of Variance
- Chapter 9: Analysis of Two-Way Tables (if time permits)