STAT 101
Introduction to Statistics

Fall 2012
Day Course
Statistics Workshop

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

This course may be applied to the Certificate of Liberal Arts

Instructor: Dr. Rick Routledge
Lab Instructor: Robin Insley

Prerequisite:

Intended to be particularly accessible to students who are not specializing in Statistics. Students with credit for ARCH 376, BUEC 232 (formerly 332) or STAT 270 (formerly MATH 272 and 371) may not subsequently receive credit for STAT 101-3. Students with credit for STAT 102, 201, 203 (formerly STAT 103), 301, MATH 101 or 102 may not take STAT 101 for further credit.

Textbook:

The Basic Practice of Statistics, 6th Edition, by D. S. Moore, W. I. Notz, and M. A. Fligner, W.H. Freeman Publishers
The textbook package is available at the SFU Bookstore. Alternately, students may purchase the online text and resources (StatsPortal) at the Freeman website: **http://www.bfwpub.com/**

Calendar Description:

The collection, description, analysis and summary of data, including the concepts of frequency distribution, parameter estimation and hypothesis testing. **Quantitative.**

Outline:

Aimed at a non-mathematical audience, this course discusses procedures that are most commonly used in the summary of statistical surveys and in the interpretation of experimental data. The rationale for these procedures is explained in detail, but the use of mathematical formulas is kept to a minimum.
The course will include an introduction to JMP, a computer package for statistics. You will have access to the computers in the STAT Workshop.

1. Exploring Data:
Graphing data, measuring the centre and amount of spread in data, the normal curve.
2. Exploring Quantitative Relationships:
Plotting and summarizing the relationship between two variables or categorizations.
3. Producing Data:
Discussion and comparison of observational studies, sample surveys, and controlled experiments.
4.Probability and Chance Variation:
Basic concepts, probability rules, basic probability calculations, the "law of averages", and the normal and binomial distributions.
5. Basic Statistical Inference:
The basic reasoning involved in drawing statistical inferences with applications to a mean, a difference of means, a proportion, and a difference between proportions.
7. Inference on Relationships:
Basic inference procedures on the relationship between to variables or categorizations.

Grading Scheme:

Homework – 20%
Midterm – 30%
Final – 50%
Grading is subject to change.

Students should be aware that they have certain rights to confidentiality concerning the return of course papers and the posting of marks. Please pay careful attention to the options discussed in class at the beginning of the semester. Students are reminded that Academic Honesty is a cornerstone of the acquisition of knowledge. Scholarly integrity is required of all members of the University. Students are encouraged to review policies pertaining to academic integrity available on Student Services webpage at http://students.sfu.ca/academicintegrity.html

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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.

Revised June 19, 2012