

## INTRODUCTION TO STATISTICS (3)

Class Number: 4109 Delivery Method: In Person

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### COURSE TIMES + LOCATION:

Mo, We, Fr 9:30 AM – 10:20 AM  
BLU 9660, Burnaby

### EXAM TIMES + LOCATION:

Dec 8, 2016  
12:00 PM – 3:00 PM  
SSCB 9200, Burnaby

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### INSTRUCTOR:

Scott Pai

## Description

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### CALENDAR DESCRIPTION:

The collection, description, analysis and summary of data, including the concepts of frequency distribution, parameter estimation and hypothesis testing. To receive credit for both STAT 100 and STAT 101, STAT 100 must be taken first. Intended to be particularly accessible to students who are not specializing in Statistics. Students with credit for any of ARCH 376, BUEC 232, STAT 201, 203 or 270 may not subsequently receive credit for STAT 101-3. Quantitative.

### COURSE DETAILS:

**This course may be applied to the Certificate in Liberal Arts**

**Lab Instructor: Marie Loughin**

### 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.
6. **Inference on Relationships:** Basic inference procedures on the relationship between to variables or categorizations.

## Grading

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Homework	15%
Midterm 1	20%
Midterm 2	20%
Final Exam	45%

NOTES:

***All Grading is subject to change.***

## Materials

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REQUIRED READING:

**Required Textbook:**

***The Basic Practice of Statistics (7th ed.)*** by D. S. Moore, W. I. Notz, and M. A. Fligner. Publisher: 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/>

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DEPARTMENT UNDERGRADUATE NOTES:

**Students with Disabilities:**

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

**Tutor Requests:**

Students looking for a Tutor should visit <http://www.stat.sfu.ca/teaching/need-a-tutor-.html>. We accept no responsibility for the consequences of any actions taken related to tutors.

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REGISTRAR NOTES:

SFU's Academic Integrity web site <http://students.sfu.ca/academicintegrity.html> is filled with information on what is meant by academic dishonesty, where you can find resources to help with your studies and the consequences of cheating. Check out the site for more information and videos that help explain the issues in plain English.

Each student is responsible for his or her conduct as it affects the University community. Academic dishonesty, in whatever form, is ultimately destructive of the values of the University. Furthermore, it is unfair and discouraging to the majority of students who pursue their studies honestly. Scholarly integrity is required of all members of the University. <http://www.sfu.ca/policies/gazette/student/s10-01.html>

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