

## STAT 270 Introduction to Probability and Statistics

**Spring 2014**

**Credits:** 3

**Section:** C100

**Course Description:**

This is one of the first courses in probability and mathematical statistics: Basic laws of probability, sample distributions, introduction to statistical applications.

The course consists of the following general topics:

1. Introduction to descriptive statistics
2. Concepts of probability and tools for calculating probability
3. Discrete distributions: Variables, expectations and Binomial and Poissons distributions
4. Continuous distributions: Normal, gamma, and exponential distributions, normal approximation to Binomial distribution, jointly distributed random variables, the central limit theorem
5. Inference: Single samples-estimation, hypothesis testing
6. Inference: Two samples-normal, large samples, and paired cases

**Requisite:**

Corequisite: MATH 152 or 155 or 158. Students wishing an intuitive appreciation of a broad range of statistical strategies may wish to take STAT 100 first. Quantitative.

**Textbook:**

- Swartz, Tim. [\*INTRODUCTION TO PROBABILITY AND STATISTICS\*](#). (CUSTOM) Pearson Education

*Textbook(s) are available for purchase from the SFU Burnaby Bookstore approximately 3 weeks prior to the start of classes, either in person or online through the SFU Bookstore [eService](#).*

**Course Material:**

All course material available online the first day of classes.

**Delivery Method:**

- [Canvas](#)

- [LON-CAPA](#)

**Delivery Notes:**

LON CAPA (a web based course management system accessed through your browser) will be used for practice problems.

**Course Requirements:**

Assignment/Exam	Percentage
Assignment 1	5%
Assignment 2	5%
Assignment 3	5%
<a href="#">Mid-term Exam</a>	30%
<a href="#">Final Exam</a>	55%

**Requirements Notes:**

To pass the course, you must pass the final exam.

**Please note:** Students requiring accommodation as a result of a disability must contact the Centre for Students with Disabilities at 778-782-3112 or [csd\\_office@sfu.ca](mailto:csd_office@sfu.ca).

Students are responsible for following all exam policies and procedures (e.g., missing an exam due to illness) [available here](#).

This course outline was accurate at the time of publication but is subject to change. Please check your course requirements carefully when your class starts.