# **Course Outline**

<u>Course Information</u> | <u>Program Information</u> | <u>Department Information</u> | <u>All SFU CODE Courses</u> | <u>Courses by term</u>

**Course Title:** Introduction to Probability and Statistics

Course Code: STAT 270

Fall 2012 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  $\underline{\text{eService}}$ .

#### **Course Material:**

All course material available online the first day of classes.

#### **Course Requirements:**

Assignment/Exam	Percentage
Assignment 1	5%
Assignment 2	5%
Assignment 3	5%
Mid-term Exam	30%
Final Exam	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.

Students are responsible for following all exam policies and procedures (e.g., missing an exam due to illness) available <a href="here">here</a>.

#### Fees:

- Course materials & service fee \$40.00 CAD

## **Delivery Method:**

- WebCT
- LON-CAPA

### **Delivery Notes:**

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

**Please Note:** 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.

This page was last updated on 29 June 2012.