

# Course Outline

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

**Course Code:** STAT 270

**Spring 2011**

**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(s): 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:**

- Devore, Jay L.. [\*PROBABILITY AND STATISTICS FOR ENGINEERING AND THE SCIENCES\*](#). (7TH) Nelson (Brooks / Cole)

**Course Material:**

- [Study Guide](#)

Students must indicate Pickup or Mail when enrolling in the Student Information System (SIS), in order to receive the required course material listed above

**Course Requirements:**

| Assignment/Exam               | Percentage |
|-------------------------------|------------|
| Assignment 1                  | 5%         |
| Assignment 2                  | 5%         |
| Assignment 3                  | 5%         |
| Assignment 4                  | 5%         |
| <a href="#">Mid-term Exam</a> | 25%        |
| <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).

**Fees:**

- [Course materials & service fee](#) \$40.00 CAD

**Delivery Method:**

- [WebCT](#)

- [eLive](#)

- LON-CAPA

**Delivery Notes:**

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

Speakers and a microphone or a headset is required to use eLive.

**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 03 November 2010.