Spring SEMESTER 2009 COURSE OUTLINE

STAT 270–3 (STATISTICS & ACTUARIAL SCIENCE) INTRODUCTION TO PROBABILITY AND STATISTICS

C100

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

This 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 Poisson 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 sample-estimation, hypothesis testing
- 6. Inference: Two samples-normal, large samples and paired cases

Prerequisite(s): 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.

Text(s):

Devore, J. (2008). *Probability and Statistics for Engineering and the Sciences* (7th ed.). (*Includes access code to online resources Minitab, SAS & SPSS, etc.*). Nelson (Brooks/Cole).

REQUIREMENTS:	Assignment 1		5%
	Assignment 2	!	5%

Assignment 2	5%
Midterm exam	25%
Assignment 3	5%
Assignment 4	5%
Final exam	55%

REQUIREMENTS Note: To pass the course, you must pass the final exam.

Note: Refer to exam schedule on the CODE web site www.sfu.ca/code.

Students requiring accommodations as a result of a disability, must contact the Centre for

Students with Disabilities (778-782-3112 or csd_office@sfu.ca).

DELIVERY MODE: Print

WebCT eLive

LON-CAPA

(To view computer requirements for this course, go to www.sfu.ca/code, click on "CODE Courses/Outlines," then department name to find the online course outline. Then click on the

"computer requirements" link.)

Mode of Delivery

LON CAPA (a web based course management system accessed through your browser) will

NOTE: be used for practice problems.

SUPPLEMENTARY Course materials and service fee Deposit for additional materials \$0.00

Note: Every distance course includes a CODE package containing assignment deadlines and other information. Please pick it up at the Centre or ask that it be mailed when registering on goSFU.

1300 West Mall Centre Phone: 778.782.3524
Web: www.sfu.ca/code Toll Free in Canada: 1.800.663.1411
Last updated: 10/9/2008 Fax: 778.782.4964

WebCT and eLive Computer Requirements

- This course requires active online participation in *WebCT* (a web-based course management system) and *Elluminate Live*, also called *eLive* (an audio-based online conferencing tool).
- Please refer to eLive Set-up and Help.
- On-campus computer facilities are available. If you are using your own computer, these are the *minimum* computer requirements:

Hardware

- PC with Windows 2000, ME, NT, XP, or Vista OR Mac with OS X or later
- 256 MB of RAM for Windows, 128 MB of RAM for OS X, 10.2, 10.3, 256 MB for OS X 10.4
- 56K baud modem or higher
- Sound card with speakers and microphone, or headset
- CD-ROM

Software and Other

- Internet connection and e-mail access
- Supported browsers and JVM for WebCT
- One of the following web browsers:

PC Mac
Internet Explorer 6, 7 Firefox 1.0
Firefox 1.5, 2.0 Safari 1.3

For more information about supported Web browsers and Java Virtual Machine visit this site.

WebCT Access and Accounts

- Access to WebCT begins on the first day of classes.
- To access WebCT go to the WebCT site.
- **SFU students:** Use your SFU computing account ID and password to log into *WebCT*. <u>Click here</u> for information about how to get your SFU Computing ID.
- TRU-OL students: WebCT access details will be provided in your CODE course package.

Connecting to the Internet from Home

You are responsible for setting up your connection through your own external Internet service provider (ISP) (e.g., Telus, Shaw, etc.).

General

- Prior computer knowledge is expected (i.e., ability to save files, install programs, and maintain your computer). Familiarity with the Internet, e-mail, and related applications is strongly recommended.
- Support is not available for general computer problems (e.g., operating system, hardware).

Need Help?

- General inquiries: CODE technical support (WebCT & eLive) or call 778-782-5575.
- <u>eLive FAQs</u> for students.
- WebCT FAQs for students.
- Help with your SFU computing account or call 778-782-3230, or visit AQ 3148 on the Burnaby campus.