SUMMER SEMESTER 2007 COURSE OUTLINE

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

This is a first course in probability and mathematical statistics: Basic laws of probability, 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: Random 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): Math 152 or 155 or 158 must precede or be taken concurrently. If preceding, the grades should be C- or better. Students wishing an intuitive appreciation of a broad range of statistical strategies may wish to take STAT 100 first. Quantitative.

TEXT(S):

Devore, J. Probability and Statistics for Engineering and the Sciences (6th ed) (contains CD that includes Minitab, SAS & SPSS/passcode for online resources). Thomson/Nelson. (2004).

R EQUIREMENTS:	Assignment 1	5%
	Assignment 2	5%
	Midterm exam	25%
	Assignment 3	5%
	Assignment 4	5%
	Final exam	55%
Requirements Note:	Note: To pass the course, you must pass the final exam. Refer to exam schedule on the CODE web site http://www.sfu.ca/cde . Students requiring accommodations as a result of a disability, must contact the Centre for Students with Disabilities (604-291-3112 or csdo@sfu.ca).	
DELIVERY MODE:	Print	
	WebCT	
	eLive	
	(see over for computer requirements)	
Mode of		
Delivery Note:	n/a	
SUPPLEMENTARY	FEES: Course materials and service fee	\$40.00
	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.

Computer Requirements: *WebCT* and *eLive*

- 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 the "eLive: Getting Started" document in your course package for more information about using *eLive* in your course.
- On-campus computer facilities are available. If you are using your own computer, these are the *minimum* computer requirements:

Hardware

- □ PC with Windows 98, 2000, ME, NT, XP, or Vista **OR** Mac with System 9x or later
- □ 128 MB RAM
- □ 56K baud modem or higher
- □ Sound card with speakers and microphone, or headset
- □ CD-ROM

Software and Other

- □ Internet connection and e-mail access
- □ Latest version of Java (www.java.com)
- One of the following web browsers:

<u>PC</u>	Mac
Internet Explorer 6, 7	Mozilla 1.7.x (OS X only)
Netscape 7.2	Firefox 1.0.x (OS X only)
AOL 9	Safari 1.2, 1.3, 2.x; and 2.x
Mozilla 1.7.x	for x86 Intel platform
Firefox 1.0, 1.5	-

WEBCT ACCESS AND ACCOUNTS

- Access to *WebCT* begins on the first day of classes.
- All students: To access your online course, go to <http://www.webct.sfu.ca> and log in with your *WebCT* ID and password.
- **SFU students:** Use your SFU computing account ID and password to log into *WebCT*. If you don't have an SFU computing ID, get it online at http://my.sfu.ca.

• **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, either through SFU or your own external Internet service provider (ISP) (e.g., Telus, Shaw, etc.).
- For information on Internet service available through SFU, please consult the Academic Computing Services (ACS) web site at **<http://www.sfu.ca/acs/modems/index.htm>**.
- The subsidized modem hours allotted to you (four hours of access per credit hour) may not be sufficient to complete the required course work.
- A voucher system has been implemented to allow you to pay for continued modem access at 604-677-6678 (after your subsidized access is used up). Vouchers may be purchased from campus bookstores in increments of \$20. At 60¢ per hour, each voucher is good for approximately 33 hours. Instructions are included with the voucher. For more information please go to <http://www.sfu.ca/acs/modems/index.htm>.

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**?

- CODE Technical Support (*WebCT* & *eLive*) at <help@firstclass.sfu.ca>, or 778-782-5575.
- eLive FAQs for students at <http://www.elluminate.com/support/faqs>.
- *WebCT* FAQs for students at <http://webct.sfu.ca>.
- Help with your SFU computing account at <help@sfu.ca>, 778-782-3230, or visit AQ 3148.