Summer 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%	
	Midterm exam		25%	
	Assignment 3		5%	
	Assignment 4		5%	
	Final exam		55%	
Requirements Note:	To pass the course, you must pass the final exam. To review the exam schedule go to: www.sfu.ca/code. Students requiring accommodation as a result of a disability, must contact the Centre for Students with Disabilities (778-782-3112 or csd_office@sfu.ca).			
Delivery Mode:	E: Print WebCT			
	eLive			
	LON-CAPA			
	(To view the computer requirements for this course go to www.sfu.ca/code, click on "CODE Courses/Outlines," click on the department name, click on the course outline link, and then click on the "computer requirements" link.)			
Mode of Delivery Note:	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.			
Supplementary Fees:	Course materials and service fee Deposit for additional materials	\$40.00 \$0.00		
Note: Every distance course includes a CODE package containing assignment deadlines and other information				

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.

WebCT, eLive, and LON-CAPA Computer Requirements

- This course requires active online participation in *WebCT* (a web-based course management system) *Elluminate Live*, also called *eLive* (an audio-based online conferencing tool), and *LON-CAPA* (an online learning management system).
- Please refer to <u>eLive Set-up and Help</u>.
- Please refer to the "STAT 270: Getting Started with LON-CAPA" document in your course package for more information about using LON-CAPA 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
- 256 MB of RAM for Windows, 1GB for Vista, 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 <u>JVM for WebCT</u>
- One of the following web browsers:

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

WebCT Access and Accounts

- Access to *WebCT* begins on the first day of classes.
- To access WebCT go to the <u>WebCT site</u>.
- 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.

LON-CAPA Access and Accounts

- Access to LON-CAPA begins on the first day of classes. You can access LON-CAPA through the following SFU servers:
 - o http://lewis.chem.sfu.ca
 - o <u>http://nernst.chem.sfu.ca</u>
 - o http://newton.science.sfu.ca
- **SFU students:** Use your SFU computing account ID and your SFU student number to log into *LON-CAPA*. If you don't have an SFU computing ID, <u>get it online</u>.
- **TRU-OL students:** Your LON-CAPA ID and password is your TRU-OL student number.

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: <u>CODE technical support</u> (*WebCT* & *eLive*) or call 778-782-5575.
- <u>eLive FAQs</u> for students.
- <u>WebCT FAQs</u> for students.
- For *LON-CAPA* technical problems or system failures, report to <u>Ray Batchelor</u>, or use the "Contact Helpdesk" link from the log-in screen.
- <u>Help</u> with your SFU computing account or call 778-782-3230, or visit AQ 3148 on the Burnaby campus.