# FALL SEMESTER 2008 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
- 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).

<b>Requirements:</b>	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.	
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	r csd_office@sfu.ca).
<b>Delivery Mode:</b>		
	WebCT	
	eLive	
	LON-CAPA	
	(To view computer requirements for this course, go to www.sfu.ca/code, click on "CODE	
	<i>Courses/Outlines," then department name to find the online course outline. Then click on the "computer requirements" link.)</i>	
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 \$4	40.00
FEES:		50.00

*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.* 

## 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 the "*eLive*: Getting Started" document in your course package for more information about using *eLive* in your course.
- 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, 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	Mozilla 1.7.x (OS X only)
Netscape 7.2	Firefox 1.0.x (OS X only)
Mozilla 1.7.x	Safari 1.2, 1.3, 2.x; and 2.x for x86 Intel platform
Firefox 1.0.x, 2.0.x	

#### 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 <u>http://lewis.chem.sfu.ca</u>
  - 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.
- Help with your SFU computing account or call 778-782-3230, or visit AQ 3148 on the Burnaby campus.