# SUMMER TERM 2010 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

**REQUISITE(S):** Corequisite: MATH 152 or 155 or 158. Students wishing an intuitive appreciation of a broadrange 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).

NOTE: Students purchasing a used textbook must ensure that the CD is present (with a functional password)

Requirements:	Assignment 1 Assignment 2 Midterm exam Assignment 3 Assignment 4 Final exam		5% 5% 25% 5% 5% 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:	Print WebCT eLive LON-CAPA		
Mode of Delivery Note:	Assignment Submission Method: Print 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 are required to use eLive.		
SUPPLEMENTARY FEES: Note: Every distant	Course materials and service fee Deposit for additional materials <i>ce course includes a CODE package containing</i>	\$40.00 \$0.00 g assignment deadlines and c	ther information.

Please pick it up at the Centre or ask that it be mailed when registering on Student Information System (SIS).

# 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	Mac
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, get it online.
- 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.