## FALL TERM 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

REOUISITE(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 funtional password)

REQUIREMENTS:	Assignment 1	5%
	Assignment 2	5%
	Midterm exam	25%
	Assignment 3	5%
	Assignment 4	5%
	Final exam	55%

REQUIREMENTS To pass the course, you must pass the final exam. To review the exam schedule go to: www.sfu.ca/code. Note:

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

(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

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

**DELIVERY** be used for practice problems.

Note: Speakers and a microphone or a headset is required to use eLive.

**SUPPLEMENTARY** Course materials and service fee \$40.00 Deposit for additional materials \$0.00 FEES:

**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 Web: www.sfu.ca/code Last updated: 6/30/2009

Phone: 778.782.3524 Toll Free in Canada: 1.800.663.1411 Fax: 778.782.4964

- 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 *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.

#### 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 http://nernst.chem.sfu.ca
  - 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.
- *eLive* FAQs for students.
- *WebCT* FAQs 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.