

FALL SEMESTER 2006 COURSE OUTLINE
STAT 270–3 (STATISTICS & ACTUARIAL SCIENCE)
INTRODUCTION TO PROBABILITY AND STATISTICS



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 variable, The central limit theorem
5. Inference: single samples-Estimation, hypothesis testing
6. Inference: Two samples-normal, large samples and paired cases

PREREQUISITE: 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/Brooks Cole. (2004).

REQUIREMENTS: 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.

Please see exam schedule in Registration Timetable.

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

MODE OF DELIVERY NOTE:

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 or ask that it be mailed when registering on goSFU.

If one or more of these symbols appear at the top of this page, it indicates an equipment **requirement** :

computer (see over) internet access

Audio CD

email DVD

1300 West Mall Centre
 Phone: 604-291-3524
 Toll Free in Canada: 1-800-663-1411
 Fax: 604-291-4964
 Web: www.sfu.ca/cde

Last updated: 7/7/2006

Computer Requirements for *WebCT*

- This course requires active online participation in *WebCT* (a web-based course management system).
- 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, NT, XP, or ME* **OR** Mac with *System 9x* or later (CMPT 165 students – PC (as above) **OR** Mac with *System OSX*).
- ❑ 64 MB RAM
- ❑ 56K baud modem or higher

Software & Other

- ❑ Internet connection
- ❑ E-mail (e.g. *Eudora, Outlook Express*, or equivalent)
- ❑ Web browser that supports tables, frames, Java, and Javascript; *Internet Explorer* version 6.0 or higher is recommended. Mozilla 1.7. Firefox 1.0 (not 1.5). Netscape Navigator is not recommended.

WebCT Access & Accounts

- **Access to *WebCT* begins on the first day of the semester.**
- **All students:** To access your online course, go to [<http://www.webct.sfu.ca>](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>](http://my.sfu.ca).
- **OU students:** Your *WebCT* ID consists of the letters "ou" followed by a hyphen, your first and last name. Letters should be all together, in lower case, with no spaces in between (e.g., John Doe's ID would be **ou-johndoe**). Your password is your OU student number.

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: [<http://www.sfu.ca/acs/modems/index.htm>](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 cents per hour, each voucher is good for approximately 33 hours. Instructions are included with the voucher. For more information please see [<http://www.sfu.ca/acs/modems/index.htm>](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?

- General inquiries: CDE technical support, [<help@firstclass.sfu.ca>](mailto:help@firstclass.sfu.ca) or 604-291-5575
- *WebCT* FAQs for students: <http://webct.sfu.ca>
- Help with your SFU computing account: [<help@sfu.ca>](mailto:help@sfu.ca), 604-291-3230, or visit AQ 3148