CAMOSUN COLLEGE

COURSE OUTLINE

WINTER 2004

MATH 116 Elementary Statistics

Instructor: Susan Chen Office: Ewing 260 Phone Number: 370 – 3497 Email: <u>chen@camosun.bc.ca</u> Webpage: <u>http://ccins.camosun.bc.ca/~chen/</u>

Calendar Description: This course is designed for students in criminal justice and social science programs. Topics: descriptive statistics, probability and probability distributions, the normal distribution, estimating population means and proportions, hypothesis testing, goodness of fit, linear correlation and regression, and non-parametric statistics.

In-Class Workload: 4 lectures each week, 1 computer lab every other week.

Out-of-Class Workload: 4 – 6 hours per week.

Textbook:

Triola, Goodman and Law, Elementary Statistics, Second Canadian Edition, Addison-Wesley, 2002.

Sections
1.1 - 1.4
2.1 - 2.7
3.1 - 3.4, 4.1 - 4.4
5.1 - 5.5
6.1 - 6.4
7.1 – 7.5
10.1 – 10.3
9.1 - 9.3
8.1 - 8.3, 8.6
13.1 - 13.3 if time permits

Lab: This course includes lab sessions designed to familiarize students with the use of a computer as a tool for statistical analysis. The computer software we will use is Statistics Program for Social Scientists (SPSS). <u>You must have a computer account and a lab manual ready before your first lab</u>. The required lab manual is available in the bookstore at Lansdowne Campus. A lab assignment will be assigned for each lab session. A take-home Lab Final Examination will be given near the end of the term.

Against All Odds: Inside Statistics Video Series: The college purchased this video series to assist you studying this course. Each video focuses on one topic of this course. Students who have viewed these videos in the past found them helpful and fun to watch. The videos can be signed out the same way as books. You can view them in the video room in the library as well.

Calculator: A scientific calculator with statistics mode is required. For example, SHARP EL-531V Advanced D.A.L. (\$15 - \$20 range) is a suitable calculator. When you purchase a calculator, consider one that has the following functions that are necessary for Math 116: (1) Normal scientific calculations, (2) Single-variable statistical calculations, (3) Two-variable statistical calculations including correlation and linear regression. Different calculators function differently. You will need to learn to use your own calculator using the manual comes with it.

Homework: The homework problems for this course are posted on my web page and will be handed out in class. All "required" homework problems assigned to those sections that will be examined by a test are due in class immediately before that test for credit (to check for completion).

- (i) You must label your homework with section number, page number and question number.
- (ii) You must show all work for each problem. An answer without work will not be counted as "complete".
- (iii) You must mark your homework against the answers in the back of the textbook. Mark your answer with either a check sign " $\sqrt{}$ " or an "X" with correction. The number of incorrect problems will <u>not</u> affect your mark on the homework as long as corrections were made.
- (iv) List the number of questions that were not completed in each section.
- (v) On the front page of the homework, give the total number of questions that were not completed in this homework.

The key for earning a good grade in a Statistics course, in particular this course, is to do homework after every class and to stay on top consistently. **Cramming will not work for this course.**

Practice Tests: There will be a practice-test-session in class on the day before each test. Students are encouraged to ask questions and to discuss among peers during the sessions. Students benefit the most from these practice tests when they have done their review for the test before the practice-test-session.

Evaluation: A tentative schedule for the tests and their percentages as that of the final grade are given in the table below. Each test covers material learned between this test and the previous test. The final exam covers all materials. The student's evaluation may be solely based the results of the final examinations provided that all homework and lab-assignments are completed up to the instructor's satisfaction.

Test 1	Thursday, January 29	10%
Test 2	Thursday, February 19	10%
Test 3	Thursday, March 11	10%
Test 4	Tuesday, April 6	10%
Homework and Lab assignments		10%
Final Exam Part I:	In the second last week of the	10%
Lab Final (take home)	term.	
Final Exam Part II:	Time and room TBA	40%
Regular (3 hours)		

All tests must be written during the scheduled period and no late hw/assignments will be accepted.

NOTE: Final examinations will be held from April 13 to 17 and from April 19 to 21. You must be available to write at the scheduled time.

Grading:

A+ : 95 - 100%	B+:80 - 84%	C+: 65 - 69%	F: 0 - 49%
A: 90 - 94%	B: 75 - 79%	C : 60 - 64%	
A-: 85- 89%	B-: 70 - 74%	D: 50 - 59%	