## Camosun College

Department of Mathematics
Course Outline

## Math 116 Elementary Statistics

This Course is designed for students in social science programs. Topics: descriptive statistics, probability, the normal distribution, estimating population means and proportions, hypothesis testing, linear correlation, regression, goodness-of-fit, and non-parametric tests, applications using SPSS. (T)

Offered: Fall, Winter, Spring
Credit:
IN-CLASS WORKLOAD:
OUT-OF-CLASS WORKLOAD:
PREREQUISITES:
4
4 hours weekly plus 1 hour lab on alternate weeks
4-7 hours weekly
INSTRUCTOR:
MATH 060
Bill Calver (office: E248, tel. 370-3504
e-mail: calver@camosun.bc.ca

| Topic | $\underline{\text { Sections }}$ |
| :--- | :--- |
| Introduction | $1.1-1.4$ |
| Descriptive Statistics | $2.1-2.7$ |
| Probability | $3.1-3.4,4.1-4.4$ |
| Normal Probability Distribution | $5.1-5.5$ |
| Estimates and Sample Sizes | $6.1-6.4$ |
| Hypothesis Testing | $7.1-7.5$ |
| Correlation and Regression | $9.1-9.3$ |
| Chi-Square Tests | $10.1-10.3$ |
| Tests Comparing Two Parameters | $8.1-8.3,8.6$ |

## Evaluation

$40 \%$ of your final grade will be taken from a 3 hour final examination. This examination will be written between Monday December 13 and Tuesday December 21.
$40 \%$ of your final grade will be taken from a series of tests written during the semester.
Test 1: Friday, Jan 28, Test 2: Friday Feb 25, Test 3: Friday Mar 18
$5 \%$ of your final grade will be taken from assignments handed in during the semester.
$5 \%$ of your final grade will be taken from the lab exercises.
$10 \%$ of your final grade will be taken from a final lab exam.
If your final exam mark is greater than your term mark, only your final exam mark will be used to compute your grade (assuming that assignments and lab exercises are completed satisfactorily - no more than 1 assignment and/or 1 lab exercise is missing).

Note - All tests must be written during the scheduled period and all assignments must be handed in on time.

| Gradi ng: | A+ | 95 | t o | 100 | B+ | 80 | t o | 84 | C+ | 65 | t o |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | A | 90 | t o | 94 | B | 75 | t o | 79 | C | 60 | t o |
| 64 |  |  |  |  |  |  |  |  |  |  |  |
|  | A- | 85 | t o | 89 | B- | 70 | t o | 74 | D | 50 | t o |
|  | 59 |  |  |  |  |  |  |  |  |  |  |

Text: Triola, Goodman, Law, Elementary Statistics (Second Canadian edition), Addison-Wesley 2000, Inc.

MATH 116

|  |  | Winter 2005 |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Jan 10 | Introduction |  | 7 | 6.4 |
| 11 |  |  | 8 | Lab 4A |
| 12 | 1.1/1.2 |  | 9 | Assignment 4 |
| 13 | 1.3 |  | 10 | 7.1/7.2 |
| 14 | 1.4 |  | 11 | 7.3 |
|  |  |  |  |  |
| 17 | 2.1/2.2 |  | 14 | 7.3 |
| 18 | Lab 1A |  | 15 | Lab 4B |
| 19 | 2.3 |  | 16 | Assignment 5 |
| 20 | 2.4 |  | 17 | 7.4 |
| 21 | calculator |  | 18 | Test 3 |
|  |  |  |  |  |
| 24 | 2.5 |  | 21 | 7.5 |
| 25 | Lab 1B |  | 22 |  |
| 26 | Assignment 1 |  | 23 | Assignment 6 |
| 27 | 2.6 |  | 24 | 10.1/10.2 |
| 28 | Test 1 |  | 25 | Good Friday |
|  |  |  |  |  |
| 31 | 2.7 |  | 28 | Easter Monday |
| Feb 1 | Lab 2A |  | 29 | Lab 5A |
| 2 | 3.1/3.2 |  | 30 | 10.3 |
| 3 | 3.3 |  | 31 | 9.1/9.2 |
| 4 | 3.3 |  | Apr 1 | 9.3 |
|  |  |  |  |  |
| 7 | 3.4 |  | 4 | 8.1/8.2 |
| 8 | Lab 2B |  | 5 | Lab 5b |
| 9 | Assignment 2 |  | 6 | Assignment 7 |
| 10 | Reading |  | 7 | 8.3 |
| 11 | Break |  | 8 | 8.6 |
|  |  |  |  |  |
| 14 | 4.1/4.2 |  | 11 |  |
| 15 |  |  | 12 |  |
| 16 | 4.3 |  | 13 | Assignment 8 |
| 17 | 4.4 |  | 14 |  |
| 18 | 5.1/5.2 |  | 15 | Last day of classes |
|  |  |  |  |  |
| 21 | 5.3 |  | 18 | Exams start |
| 22 | Lab 3A |  | 19 |  |
| 23 | Assignment 3 |  | 20 |  |
| 24 | 5.4 |  | 21 |  |
| 25 | Test 2 |  | 22 |  |
|  |  |  |  |  |
| 28 | 5.5 |  | 25 |  |
| Mar 1 | Lab 3B |  | 26 | Exams end |
| 2 | 6.1/6.2 |  | 27 |  |
| 3 | 6.3 |  | 28 |  |
| 4 | 6.4 |  | 29 |  |

