

CAMOSUN COLLEGE
Mathematics Department
Course Outline
MATH 116 Elementary Statistics

Instructor: Stan Toporowski
Office: Ewing 254 Lansdowne Campus
Phone: 370-3493
email: toporowski@camosun.bc.ca
web page: <http://www.camosun.bc.ca/~toporows>

Description: This course is designed for students in criminal justice and social science programs. Topics will include: descriptive statistics, probability, the normal distribution, estimating population means and proportions, hypothesis testing, linear correlation and regression, goodness of fit, non-parametric statistics and applications using SPSS (Statistics Program for Social Scientists).

Classes: Lectures MTWTh 2:30pm – 3:20pm in Y217, Labs Friday 2:30pm – 3:20pm (alternate weeks) in E103 .

Prerequisite: Math 11 or Math 062 with a C+ or Math 063 with a C or Math 12 or by assessment.

Textbook: [Elementary Statistics, Second Canadian Edition](#) by Triola, Goodman and Law **and** the [Math 116 Lab Manual](#) . Both books are available in the Camosun Bookstore

Calculator: You will require a scientific calculator with statistics mode for this course (e.g. Sharp EL-531V). Any calculator capable of normal scientific calculations, single variable statistical calculations and two variable statistical calculations including regression and correlation would be appropriate. Because various calculators operate slightly differently, you will need to use the manual that comes with your calculator to familiarize yourself with its operation.

Computer Labs: This course includes computer labs, which are designed to familiarize students with the use of computers in doing statistical analysis. The software package we will be using is SPSS. You should get a computer account and lab manual before the first lab. A Final Lab Exam will be given near the end of the semester.

Videos: There is a series of videos entitled [Against All Odds: Inside Statistics](#) available in the Library. These are designed to help you to understand the

course material. They can be signed out from the Library in the usual manner. You may also view them in the video room in the Library.

Grade Calculation: The final grade will be calculated as follows:

Term Tests (4): 40%
 Lab Assignments: 10%
 Final Lab Exam: 10%
 Final Exam: 40%

The final exam will cover the entire course and will be 3 hours long. It will be written during the week following the end of classes. **The time and place will be scheduled by the College.** The Final Lab Exam will be given in the second to last week of classes

Grade Scale:

%	Grade	Grade Point Value	Description
95 – 100	A+	9	Exceptional, outstanding or excellent performance. Student shows initiative and an insightful grasp of theory and technique.
90 – 94	A	8	
85 – 89	A-	7	
80 – 84	B+	6	Very good or good performance. Student shows a good overall grasp of theory and technique or an excellent grasp in some areas balanced by a satisfactory grasp in others.
75 – 79	B	5	
70 - 74	B-	4	
65 – 69	C+	3	Satisfactory performance. Student shows a satisfactory grasp of theory and technique. Students may experience some difficulty being successful in courses for which this course is a prerequisite.
60 - 65	C	2	
50 –59	D	1	Marginal performance. Student has a weak grasp of theory and technique, which is insufficient to take courses for which this course is a prerequisite.
0 - 49	F	0	Unsatisfactory performance. Student should either repeat the course or consider taking a course at a lower level.

Attendance: It is very difficult to be successful if you miss many classes as this course will contain many concepts and ideas that will be completely new to you. If you must miss classes due to illness or other reasons, let me know and I can give you an idea of what work was covered. If you must miss a test due to illness, it is very important that you contact me by phone or e-mail so that we can make appropriate accommodations.

-
-
-
-
Resources: Math Lab, Ewing 224. This is a drop-in centre where you can get help with your math homework. The hours will be posted on the door. I will also post regular office hours, check my office door or my [current timetable](#) for the times. **Set up a regular study schedule !!** You will probably have to do between 4 and 6 hours of homework a week to keep up.

-
-
-
Course Content:

TOPIC	SECTIONS
Introduction	1.1 – 1.4
Descriptive Statistics	2.1 – 2.7
Probability	3.1 – 3.4, 4.1 – 4.4
Normal Probability Distributions	5.1 – 5.5
Estimates and Sample Sizes	6.1 – 6.4
Hypothesis Testing	7.1 – 7.5
Chi-Square Tests	10.1 – 10.3
Correlation and Regression	9.1 – 9.3
Tests Comparing Two Parameters	8.1 – 8.3, 8.6
Nonparametric Tests	13.1 – 13.3

[Return to Math 116 homepage](#)