



**School of Arts & Science – Mathematics Department**  
**MATH 116 – D01 (Elementary Statistics)**  
**FALL 2007**

The Approved Course Description is available on the Internet at  
<http://www.camosun.bc.ca/calendar/current/web/math.html>  
*It is strongly recommended that you keep this outline for your records.*

### 1. Instructor Information

Instructor:	Geoff Salloum
Office:	E266
Office Hours:	I have at least one hour set aside everyday. Please find them on my website.
Email:	salloumg@camosun.bc.ca
Phone:	250.370.3504
Websites:	<a href="http://online.camosun.ca">http://online.camosun.ca</a> <a href="http://salloum.disted.camosun.bc.ca">http://salloum.disted.camosun.bc.ca</a>

### 2. Prerequisites

C+ in MATH 072, or a C in MATH 073 or Math 11 or Applications of Math 12, or a C- in Math 12, or assessment.

### 3. Course Objectives

Upon completion of this course you should be able to:

1. Identify problems in our society for which statistical analyses are suitable.
2. Compute and interpret descriptive statistics.
3. Solve basic probability problems. Distinguish between continuous and discrete probability distributions. Perform calculations involving various probability distributions including Binomial and Normal distributions.
4. Estimate the population mean and population proportion, and determine sample size.
5. Estimate the difference between two means, or two proportions.
6. Test hypotheses about a mean, a proportion, or a difference of two means or two proportions.
7. Perform basic correlation and simple linear regression analysis.
8. Perform basic categorical data analysis.
9. Perform basic statistical data analysis with a computer software package.

### 4. Required Materials

1. Intro Stats (2<sup>nd</sup> edition), De Veaux, Velleman, and Bock. Addison – Wesley, 2005.
2. SPSS version 15.
3. Math 116 Lab Manual, Calver, Chen, and Salloum. Camosun College Print Shop.
4. Sharp EL – 531 Calculator (only calculator allowed for tests and examinations)

### 5. Grade Allocation

Percentage grades will be converted to letter grades as follows:

A+	[90, 100]	B+	[77, 80]	C+	[65, 70]	F	[0, 50)
A	[85, 90)	B	[73, 77)	C	[60, 65)		
A-	[80, 85)	B-	[70, 73)	D	[50, 60)		

Note that November 6<sup>th</sup>, 2007 is the last day to withdraw from this course without a failing grade appearing on your transcript. If you desire a grade of *Audit* in the course, you will need to make this change by November 6<sup>th</sup>, 2007.

## 6. Evaluation

Your final grade will be the maximum of Scores 1 and 2, where

Score 1

5 Labs	10%
3 Tests (online approx 1-2 hr each)	15%
Take home Lab Final	10%
Cumulative Final Exam (3 hrs)	65%

Score 2

Take home Lab Final	10%
Cumulative Final Exam (3 hrs)	90%

Note that the final exam will be written in person at Lansdowne campus between December 10<sup>th</sup>, 2007 and December 18<sup>th</sup>, 2007. A final exam grade of 50% or greater must be achieved in order to obtain a final course grade of D or better.

## 7. Tentative Syllabus

Topic	Chapters
Exploring and Understanding Data	1 - 6
Exploring Relationships Between Variables	7 - 9
Gathering Data	11 - 13
Randomness and Probability	14 - 17
From the Data at Hand to the World at Large	18 - 22
Learning About the World	23 - 25
Inference When Variables are Related	26

## 8. Tests, Labs, and the Lab Final

This course includes three tests to be completed online. Tests will be randomly generated from a bank of questions that I have selected. Test dates are given below and you may start the test at any time within a 24 hour window; however, once started, you will have to complete the test within 120 minutes. Test grades will not be released until the 24 hour window has expired and after that time all students who have not completed the test will receive a grade of 0. The test dates and areas of coverage are as follows:

Test 1 (Chapters 1 – 9):	Thu, Oct 4
Test 2 (Chapters 11 – 18):	Thu, Nov 1
Test 3 (Chapters 19 – 25):	Thu, Nov 29

This course also includes 5 lab assignments each worth 2% of your final grade. The lab assignments are designed to familiarize you with the use of a computer as a tool for statistical analysis. The computer software we use is called Statistics Program for Social Scientists (SPSS). The lab assignments are included in the lab manual and once complete can be handed in online using the “dropbox.” Deadlines for handing in the lab assignments are given online and no late assignments will be accepted. A lab final worth 10% of your final grade will be distributed near the end of the term and can also be handed in using the online dropbox.

## 9. Keeping up

**Keeping up is an essential part of any statistics course as much of the material builds on itself.** This is especially important in an online course, where you have more control over the pace of the material. If you feel yourself falling behind at any point during the term, then please do not hesitate to come speak to me. Also, there are two math help centers on the Lansdowne campus staffed by instructional assistants available for free for students who would like help or would like to work with others. They are located in rooms E224 and E342.

If you are unable to complete any of the required evaluation of the course (tests, labs, etc.), then make sure to inform me in advance. Unless an appropriate reason is provided (with supporting documents), then you will receive a grade of zero. Also, be sure not to schedule anything for December until you know your exam schedule. It is possible to have an exam up to and including December 18<sup>th</sup>, 2007.

### LEARNING SUPPORT AND SERVICES FOR STUDENTS

There are a variety of services available to assist you throughout your learning. This information is available in the College calendar, at Student Services or the College web site at [camosun.ca](http://camosun.ca)

### STUDENT CONDUCT POLICY

There is a Student Conduct Policy **which includes plagiarism**. It is the student’s responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, Student Services, and on the College web site in the Policy Section.