

	<p><b>School of Arts &amp; Science</b>  <b>MATHEMATICS DEPARTMENT</b></p> <p><b>MATH 116-04</b>  <b>Elementary Statistics</b>  <b>2007F</b></p>
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## COURSE OUTLINE

The Approved Course Description is available on the web @

<http://archive.camosun.bc.ca/calendar/current/web/#MATH>

Ω Please note: this outline will be electronically stored for five (5) years only.  
It is strongly recommended students keep this outline for your records.

### 1. Instructor Information

(a)	Instructor:	Geoff Salloum	
(b)	Office Hours:	I have at least one hour set aside everyday. Please find them on my website.	
(c)	Location:	E266	
(d)	Phone:	370.3504	Alternative Phone:
(e)	Email:	salloumg@camosun.bc.ca	
(f)	Website:	<a href="http://salloum.disted.camosun.bc.ca">http://salloum.disted.camosun.bc.ca</a>	

### 2. Intended Learning Outcomes

*(No changes are to be made to this section, unless the Approved Course Description has been forwarded through EDCO for approval.)*

Upon completion of this course the student will 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, a difference of two means, or a difference of two proportions.
7. Perform basic correlation and simple linear regression analysis.
8. Perform basic categorical data analysis.
9. Perform basic statistical data analysis with the aid of a computer software package.

### 3. Required Materials

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

#### 4. Course Content and Schedule

(Can include: class hours, lab hours, out of class requirements and/or dates for quizzes, exams, lectures, labs, seminars, practicums, etc.)

#### 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.

#### 5. Basis of Student Assessment (Weighting)

(Should be linked directly to learning outcomes.)

4 Assignments / 5 Labs	20%
3 Quizzes (60-80 min each)	30%
Take home Lab Final	10%
Cumulative Final Exam (3 hrs)	40%

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

Your final grade will be the maximum of Scores 1 and 2 if all homework and lab assignments have been completed and submitted on time. Otherwise, your final grade will be Score 1. A tentative schedule for the homework assignments and quizzes is given below:

A1	T1	A2	T2	A3	T3	A4
Sep 27	Oct 4	Oct 25	Nov 1	Nov 22	Nov 29	Dec 6

#### 6. Grading System

(No changes are to be made to this section, unless the Approved Course Description has been forwarded through EDCO for approval.)

##### Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	A		8
80-84	A-		7
77-79	B+		6
73-76	B		5
70-72	B-		4
65-69	C+		3
60-64	C		2
50-59	D	Minimum level of achievement for which credit is granted; a course with a "D" grade cannot be used as a prerequisite.	1
0-49	F	Minimum level has not been achieved.	0

##### Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy E-1.5 at [camosun.ca](http://camosun.ca) for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	<i>Incomplete:</i> A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	<i>In progress:</i> A temporary grade assigned for courses that, due to design may require a further enrollment in the same course. No more than two IP grades will be assigned for the same course. (For these courses a final grade will be assigned to either the 3 <sup>rd</sup> course attempt or at the point of course completion.)
CW	<i>Compulsory Withdrawal:</i> A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.

## 7. Recommended Materials or Services to Assist Students to Succeed Throughout the Course

### LEARNING SUPPORT AND SERVICES FOR STUDENTS

There are a variety of services available for students to assist them throughout their 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, at Student Services and on the College web site in the Policy Section.

## 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

## Labs and Assignments

This course includes 5 lab sessions held every other Wednesday in E103 (see course website for specific dates) designed to familiarize you with the use of a computer as a tool for statistical analysis. The computer software we use is Statistics Program for Social Scientists (SPSS). **You must have a computer account and lab manual ready before your first lab.** Each lab session includes a lab assignment to be handed in 7 days after your lab day. There will also be four homework assignments due at the beginning of class on the due dates given above. The problems required for these assignments will be given out in class and available on my website approximately one to two weeks before they are due. They should be neat and stapled. **Late assignments will not be accepted as I post assignment solutions on the course website after class.**

## **Attendance**

Showing up to class is arguably the easiest and most important thing you can do to help your college experience. If you have to miss a class you should get the notes from another student as soon as possible. **Keeping up is an essential part of any statistics course as much of the material builds on itself.**

If you are unable to attend class during a quiz, then make sure to inform me in advance. Unless an appropriate reason is provided, absence from a quiz will result in 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, 2007.