



**School of Arts & Science
MATHEMATICS DEPARTMENT**

**MATH 116-04
Elementary Statistics
2006F**

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:	http://salloum.disted.camosun.bc.ca		

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	Elementary Statistics (2 nd Canadian edition), Triola, Goodman, and Law. Addison – Wesley, 2002. 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 Math 11, or a C in MATH 073 or Math 12 or Applications of Math 12 or assessment.

5. Basis of Student Assessment (Weighting)

(Should be linked directly to learning outcomes.)

Score 1		Score 2	
4 Assignments / 5 Labs	20%	Take home Lab Final	10%
3 Quizzes (60-80 min each)	30%	Cumulative Final Exam (3 hrs)	90%
Take home Lab Final	10%		
Cumulative Final Exam (3 hrs)	40%		

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:

Ass #1	Quiz #1	Ass #2	Quiz #2	Ass #3	Quiz #3	Ass #4
Sep 21	Sep 28	Oct 19	Oct 26	Nov 16	Nov 23	Dec 5

6. Grading System

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Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
95-100	A+		9
90-94	A		8
85-89	A-		7
80-84	B+		6
75-79	B		5
70-74	B-		4
65-69	C+		3
60-64	C		2
50-59	D		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 at camosun.ca or 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 are designed to have an anticipated enrollment that extends beyond one term. No more than two IP grades will be assigned for the same course.
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.

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 for information on conversion to final grades, and for additional information on student record and transcript notations.

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.

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

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 – 5.6
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
Non – Parametric Tests (if time permits)	13.1 – 13.3

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 19, 2006.