



**School of Arts & Science  
MATHEMATICS DEPARTMENT**

**MATH 216-01  
Applied Statistics  
2007W**

## 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
(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

Upon completion of this course the student will be able to:

1. Compute and interpret descriptive statistics.
2. Perform calculations that apply the basic properties and concepts of probability.
3. Make statistical inferences for one population and two populations.
4. Make statistical inferences for more than two populations (ANOVA).
5. Apply the technique of linear regression in circumstances where appropriate and assess the usefulness of a linear model in these situations using the concept of correlation.
6. Apply basic methods to analyze categorical data.
7. Use the statistical software MINITAB to perform basic data analysis.

### 3. Required Materials

(a)	Texts	Introduction to the Practice of Statistics (5 <sup>th</sup> edition), Moore and McCabe. Freeman, 2006. Math 216 Lab Manual, Calver and Salloum. Camosun College Print Shop.
(b)	Other	Sharp EL – 531 Calculator (only calculator allowed for tests and examinations)

## 4. Course Content and Schedule

### Prerequisites

Math 12 or assessment.

### Tentative Syllabus

Looking at Data - Distributions	1.1 – 1.3
Looking at Data - Relationships	2.1 – 2.5
Producing Data	Selections from Chapter 3
Probability – The Study of Randomness	4.1 – 4.5
Sampling Distributions	5.1 – 5.2 and Poisson handout
Introduction to Inference	6.1 – 6.3
Inference for Distributions	7.1 – 7.2
Inference for Proportions	8.1 – 8.2
Analysis of Two-Way Tables	9.1 – 9.4
Inference for Regression	10.1
One-Way Analysis of Variance	12.1

### Labs and Assignments

This course includes 5 lab sessions held every other Tuesday 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 Minitab 14. **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 6 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 April until you know your exam schedule. It is possible to have an exam up to and including April 24, 2007.

## 5. Basis of Student Assessment (Weighting)

Score 1	
4 Assignments / 5 Labs	20%
3 Quizzes (50 min each)	30%
Take home Lab Final	10%
Cumulative Final Exam (3 hrs)	40%

Score 2	
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 tests is given below:

A1	T1	A2	T2	A3	T3	A4
Jan 26	Feb 02	Feb 23	Mar 02	Mar 23	Mar 30	Apr 5

**6. Grading System**  
**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](http://camosun.ca) or information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
<b>I</b>	<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.
<b>IP</b>	<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.
<b>CW</b>	<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](http://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](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.