C A M O S U N   C O L L E G E
MATHEMATICS DEPARTMENT
CLASS OUTLINE

MATH 216 Applied Statistics

This course is intended for biology and chemistry students. Topics: analysis of data (graphically and numerically), probability, the binomial and Poisson distributions, the normal distribution, the central limit theorem, interval estimation of the population mean, percentage and standard deviation, hypothesis testing, goodness-of-fit and independence tests, analysis of variance, linear regression, applications throughout.

OFFERED:	Winter, (Fall - subject to funding)
CREDIT	4
IN-CLASS WORKLOAD:	4 lecture hrs and 1 lab hr on alternate weeks
OUT-OF-CLASS WORKLOAD:	4 - 6
PREREQUISITES:	MATH 115 or Math 12
Instructor:	Bill Calver (office E248, Tel 370-3504, calver@camosun.bc.ca)

OUTLINE	
Topic	Sections
UNIT 1: The Nature of Statistics	1.1 - 1.5, 2.1- 2.8
UNIT 2: Descriptive Statistics	3.1 – 3.6
UNIT 3: Probability	4.1 – 4.3
UNIT 4: Probability Distributions	5.1 - 5.4
UNIT 5: Sampling Concepts	6.1 - 6.3
UNIT 6: Estimating Parameters	7.1 – 7.6
UNIT 7: Hypothesis Testing: One Sample	8.1 - 8.4
UNIT 8: Hypothesis Testing: Two Samples	9.1 - 9.3, 13.3
UNIT 9: Analysis of Variance	10.1 – 10.3, 13.5
UNIT 10: Goodness of Fit & Contingency Tables	11.1 – 11.3
UNIT 11:Linear Regression	12.1 – 12.3
UNIT 12:Non Parametric Methods	13.3, 13.5

Evaluation
     50% of your final grade will be taken from a 3 hour final examination.
The final exam will be written between Monday April 18 and Tuesday April 26 inclusive (posted in Feb).
     30% of your final grade will be taken from a series of tests written during the semester.
     Test 1 Friday Feb 4**,**   **Test 2** Friday Mar 4**,**   **Test 3** Friday Apr 1
     10% of your final grade will be taken from a series of lab exercises
     5% from a lab final exam
     5% from a series of assignments

If your final exam mark is greater than your term mark, only your final exam mark and your final lab exam mark will be used to compute your grade (assuming that all assignments and lab exercises are completed satisfactorily).

Grading:	A+	95 to 100	B+	80 to 84	C+	65 to 69
	A	90 to 94	B	75 to 79	C	60 to 64
	A-	85 to 89	B-	70 to 74	D	50 to 59

TEXT: Sanders, Smidt, Adatia, Larson, Statistics A first Course, 2nd Canadian Edition, McGraw-Hill Ryerson

MATH 216

		Winter 2005		
Jan 10	1.1		7	
11			8	**Lab 4b**
12			9	8.4
13			10	9.1
14	2.8		11	9.3
17	3.1		14	13.3
18	**Lab 1a**		15	**Lab 5a**
19			16	10.1
20			17	
21	3.6		18	10.3
24	4.1		21	13.5
25	**Lab 1b**		22	**Lab 5b**
26			23	11.1
27	4.3		24	
28	5.1		25	Good Friday
31			28	Easter Monday
Feb 1	**Lab 2a**		29	**Lab 6a**
2			30	11.3
3			31	12.1
4	**Test 1**		Apr 1	**Test 3**
7	5.4		4	
8	**Lab 2b**		5	**Lab 6b**
9	6.1		6	
10	Reading		7	12.3
11	Break		8	13.3
14	6.3		11	13.5
15	**Lab 3a**		12	
16	7.1		13	
17			14	
18			15	Last day of classes
21			18	Exams start
22	**Lab 3b**		19	
23	7.6		20	
24			21	
25	8.1		22	
28			25	
Mar 1	**Lab 4a**		26	Exams end
2			27	
3			28	
4	**Test 2**		29	