

CAMOSUN COLLEGE  
MATHEMATICS DEPARTMENT  
CLASS OUTLINE

**MATH 240 Applied Statistics**

For biology, chemistry, business, Environmental Technology and Applied Chemistry and Biochemistry students. Topics: descriptive statistics, probability, binomial, Poisson and normal distributions, hypothesis testing, goodness-of-fit, confidence intervals, analysis of variance, linear regression. Applications are stressed throughout the course.

OFFERED:	Winter (Environmental Technology), Spring
CREDIT	4
IN-CLASS WORKLOAD:	4 lecture hrs and 1 lab hr on alternate weeks
OUT-OF-CLASS WORKLOAD:	4 - 6
PREREQUISITES:	MATH 108 or MATH 100
Instructor:	Bill Calver (office E248, Tel 370-3504, calver@camosun.bc.ca)

OUTLINE	
Topic	Sections
UNIT 1: Describing Data with Graphs	1.1 - 1.5
UNIT 2: Describing Data with Numbers	2.1 - 2.4, 2.6, 2.7
UNIT 3: Probability and Probability Distributions	4.1 - 4.3, 4.5, 4.6, 4.8
UNIT 4: Discrete Distributions	5.1 - 5.3
UNIT 5: The Normal Probability Distribution	6.1 - 6.4
UNIT 6: Sampling Distributions	7.1 - 7.6
UNIT 7: Large Sample Estimation	8.1 - 8.6, 8.8, 8.9
UNIT 8: Large Sample Tests of Hypothesis	9.1 - 9.4
UNIT 9: Inferences from Small Samples	10.1 - 10.3, 10.5, 10.6, 10.8, 15.5
UNIT 10: Analysis of Categorical Data	14.1 - 14.4
UNIT 11: Analysis of Variance	11.1 - 11.6, 15.6
UNIT 12: Describing Bivariate Data	3.1 - 3.4
UNIT 13: Linear Regression	12.1 - 12.7

Evaluation

45% of your final grade will be taken from a 3 hour final examination.

The final exam will be written between Monday April 14 and Friday April 25 inclusive (posted in Feb).

30% of your final grade will be taken from a series of tests written during the semester.

**Test 1** Friday Jan 31,      **Test 2** Friday Feb 28,      **Test 3** Friday Mar 28

10% of your final grade will be taken from a series of lab exercises

10% 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 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: Mendenhall, Beaver, Beaver, Introduction to Probability and Statistics, 10<sup>th</sup> edition, Duxbury Press