

CAMOSUN COLLEGE
MATHEMATICS DEPARTMENT
CLASS OUTLINE

MATH 240 Applied Statistics

For biology, chemistry, business, Environmental Technology and Applied Chemistry and Biotechnology 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
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 - 10.4, 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 - 12.6

Evaluation

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

The final exam will be written between Tuesday April 13 and Wednesday April 21 inclusive.

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

Test 1 Friday Jan 30, **Test 2** Friday Feb 27, **Test 3** Friday Mar 26

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 assignments and lab exercises are completed satisfactorily – no more than 1 assignment and/or 1 lab exercise is missing).

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, 11th edition, Duxbury Press

MATH 240

		Winter 2004		
Jan 5	1.1, 1.2		Mar 1	10.4
6	1.3, 1.4, 1.5		2	Lab 4b
7	2.1, 2.2, 2.3		3	10.4
8	2.3, 2.4		4	15.5
9	2.6, 2.7		5	10.6
12			8	10.8
13	Lab 1a		9	Lab 5a
14	4.1-4.3		10	11.1-11.4
15	4.5, 4.6		11	11.5
16	4.8		12	11.6
19	5.1, 5.2		15	15.6
20	Lab 1b		16	Lab 5b
21	5.3		17	3.1-3.4
22	6.1-6.3		18	3.4
23	6.3, 6.4		19	12.1-12.3
26	6.4		22	12.4
27	Lab 2a		23	Lab 6a
28	7.1-7.3		24	12.5
29			25	
30	Test 1		26	Test 3
Feb 2	7.4, 7.5		29	12.6
3	Lab 2b		30	Lab 6b
4	7.6		31	
5	8.1-8.3		Apr 1	
6	8.4, 8.5		2	14.1-14.3
9	8.5		5	14.4
10	Lab 3a		6	
11	8.6		7	
12	Reading		8	Last day of classes
13	Break		9	Good Friday
16	8.8, 8.9		12	Easter Monday
17	Lab 3b		13	Exams start
18	9.1-9.3		14	
19	9.3		15	
20	9.4		16	
23	10.1-10.3		19	
24	Lab 4a		20	
25	10.3		21	Exams end
26			22	
27	Test 2		23	