CAMOSUN COLLEGE	***School of Arts & Science – Mathematics Department*** **MATH 216 B04 (Applied Statistics)** **WINTER 2012**

1. Instructor Information

(a)	Instructor:	Susan Chen
(b)	Location:	Ewing260 Lansdowne Campus
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(e)	Webpage:	http://sites.google.com/site/susanstats/
(f)	Desire2Learn page	http://online.camosun.ca/
(g)	Office Hours:	Monday – Friday 1:30 – 2:30 pm, Monday 2:30 – 3:30 pm Online

2. Intended Learning Outcomes

The prerequisite is Math 12 or MATH 109, or assessment. Upon completion of this course you should 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 statistical software to perform basic data analysis.

3. Required Materials

(a)	**Texts**	**Textbook:** Introduction to the Practice of Statistics (7th edition), Moore, McCabe and Craig. Freeman, 2009.
(b)	**Other**	1. A computer with internet 2. StatsPortal, an online digital gateway to the textbook and a collection of web-based tools (the package "Textbook + StatsPortal access code" is sold in the bookstore at Lansdowne campus. 3. A Sharp EL-531 Scientific Calculator. *No other calculators are allowed for the test and the final examination.*

4. Course Content and Other Course Information

Looking at Data - Distributions	1.1 – 1.3
Looking at Data – Relationships	2.1 – 2.5
Producing Data	3.1 – 3.4
Probability – The Study of Randomness	4.1 – 4.5
Sampling Distributions	5.1 – 5.2
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
Analysis of Variance	12.1

Please refer to Pace Schedule for due dates, tests dates, lab dates and coverage planning.

5. Basis of Student Assessment (Weighting)

Score 1

Assignments and Labs	15%
Clicker quizzes	5%
Tests	30%
Lab Final Exam	10%
Cumulative Final Exam	40%

Score 2

Cumulative Final Exam	90%
Lab Final Exam	10%

Your course grade will be the higher of Score 1 and Score 2. *Note that in order to pass this course (D or higher), you must obtain a final examination score of 40% or higher.*

Please refer to the **Pace Schedule** for tentative *test dates*, lab and assignment *due dates*, and material coverage plan.

The tests and the final examination must be written during the scheduled times. In the event of a family emergency or illness, the weight of a test will be placed on the final exam *if* a note (email or paper) has been sent to the instructor before the test takes place. <u>NO</u> late assignments or lab assignments will be accepted. Final examinations will be scheduled by the college and they will take place during April 16-21, 23, 24. You must be available to write the final examination at the scheduled time. Holidays or scheduled flights are not considered to be emergencies.

6. Awards
Among other Mathematics awards, we now have a Statistics Award ($500). You can find out more information about the awards on this page: http://camosun.ca/learn/programs/math/scholarships.html.

7. Grading System

Percentage grades will be converted to letter grades as follows:

A+	[90, 100]	B+	[77, 80)	C+	[65, 70)	F	[0, 50)
A	[85, 90)	B	[73, 77)	C	[60, 65)		
A-	[80, 85)	B-	[70, 73)	D	[50, 60)		

8. Recommended Materials or Services to Assist Students to Succeed Throughout the Course

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.
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.bc.ca.