



School of Arts & Science – Mathematics Department
MATH 216 B03 (Applied Statistics)
WINTER 2012

The Approved Course Description is available on the web at <http://camosun.ca/learn/calendar/current/web/math.html>

1. Instructor Information

(a)	Instructor:	Susan Chen
(b)	Location:	Ewing260 Lansdowne Campus
(c)	Phone:	250-370-3497
(d)	Email:	chen@camosun.bc.ca
(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 and Monday 2:30 – 3:30 Online

2. Important dates

Mandatory Orientation:	Monday Jan 9	6:30PM - 7:20PM, Ewing Bldg, Room 115
Midterm Exam:	either	Monday Feb 27 2:30PM - 3:50PM, Young Bldg, Room 310
	or	Monday Feb 27 6:00PM - 7:20PM, Young Bldg, Room 310
Final Exam:	Room and Time TBA. College final exam period is April 16 – 21, 23, 24.	

3. 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 (7 th edition), Moore, McCabe and Craig. Freeman, 2011.
(b)	Other	<ol style="list-style-type: none"> 1. A computer with internet 2. StatsPortal, an online digital gateway to the textbook (The package “Textbook + StatsPortal access code” is sold in the bookstore at Lansdowne campus. 3. A Sharp EL-531 Scientific Calculator. <i>No other calculators are allowed for the test and the final examination.</i>

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

5. Basis of Student Assessment (Weighting)

Score 1		Score 2	
12 Assignments and 5 Labs	25%		
Midterm (1.5 hours)	25%	Cumulative Final Exam	90%
Lab Final Exam	10%	Lab Final Exam	10%
Cumulative Final Exam (3 hrs)	40%		

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.*

The midterm and the Final examination must be written during the scheduled times. In the event of a family emergency or illness, the weight of the midterm will be placed on the final exam if a note (email or on paper) has been sent to the instructor before the midterm time. NO 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.