



School of Arts & Science – Mathematics Department
MATH 216 – 001 (Applied Statistics)
WINTER 2013

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:	E260
(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:	MWF 1:30 – 2:30PM, Tu&Th 9:30 – 10:30AM

2. Intended Learning Outcomes

The prerequisite is Math 12 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 the statistical software MINITAB to perform basic data analysis.

3. Required Materials

(a)	Texts	StatsPortal access code for Introduction to the Practice of Statistics (7 th edition), Moore, McCabe and Craig. Freeman, 2012. Textbook (hard copy is optional): Introduction to the Practice of Statistics (7 th edition), Moore, McCabe and Craig. Freeman, 2012. Lab Manual: Math 216 Lab Manual
(b)	Other	A Sharp EL-531 Scientific Calculator. <i>No other calculators are allowed for tests and the final examination.</i>

4. Course Content

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 and Poisson handout
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 – 9.3
Inference for Regression	10.1
Analysis of Variance	12.1

Desire2Learn (D2L)

This class has the assistance of D2L, an online course management system. All course related materials, such as slides, Lab materials, practice tests and their answers, grades, discussion forum and announcements will be available on D2L. It is your responsibility to check it regularly.

D2L URL: <http://online.camosun.ca>

Username: firstname.lastnameof-birth

Password: MMDDYY of your birthdate

e.g., John Smith, birthday: 04/17/1989

Username: john.smith07

Password: 040789

Minitab Labs: This course includes 7 lab sessions. You will need the lab manual for each lab, except for the Lab Intro. The lab manual is posted on D2L. The labs are designed to familiarize you with the use of a computer as a tool for statistical analysis. The computer software we use is Minitab 16. Each lab session includes a lab assignment. There will be a lab final examination. *Please note that Minitab can be accessed in all GP labs and the Library Learning Commons.*

Homework Assignments: *"I hear and I forget. I see and I remember. I do and I understand."* There will be weekly online assignments on **StatsPortal**. **Late assignments will not be accepted.** There is also a set of **suggested problems** from the textbook to help you gain better understanding of the course material. Solutions for these problems are in the student solutions manual, via StatsPortal. For good results, make sure you attempt the problems before you look at the solutions.

Attendance

Attendance is required. Showing up to classes is the easiest and most important thing you can do to help you succeed the course. **5% of the course is assigned to daily iClicker participation. Keeping up is an essential part of any statistics course as much of the material builds on itself.** If you feel yourself falling behind at any point during the term, then please do not hesitate to come to speak to me.

Math Lab

You can get **free face-to-face tutoring** from our instructional assistant in the Math Lab **E224**. Lab hours are posted on the lab doors and on the Math Department page <http://camosun.ca/learn/programs/math/>. Find out what hours work for you best (when the lab is the least busy).

Practice Tests: There will be a practice test session before each test. Students are encouraged to ask questions and to work together with peers during these sessions. *You would benefit most from these practice tests if you attempt them after the notes are reviewed, all homework problems are completed, and a formula sheet is made.*

5. Basis of Student Assessment (Weighting)

Score 1

Assignments / Labs	15%
Clicker participation	5%
Tests (50 min each)	30%
Lab Final	10%
Cumulative Final Exam (3 hrs)	40%

Score 2

Lab Final	10%
Cumulative Final Exam (3 hrs)	90%

Your course grade will be the higher of Score 1 and Score 2 if all labs and assignments have been completed in a satisfactory manner; otherwise, your course grade will be Score 1.

Please refer to the **Pace Schedule** for tentative *test dates* and *due dates*.

All tests must be written during the scheduled times. In the event that you missed a test due to family emergency or illness, the weight of the test will be put on the final exam if a note (email or paper) has been sent to the instructor before the test time. NO late assignments or lab assignments will be accepted for credit. Final examinations will be scheduled by the college and they will take place during April 15-20, and April 22-23. You must be available to write the final examination at the scheduled time. Holidays or scheduled flights are not considered as emergencies.

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

It is the student's responsibility to become familiar with the content of Academic Policies and Procedures at <http://camosun.ca/about/policies/education-academic/e-2-student-services-&-support/e-2.5.pdf> 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.