



**School of Arts & Science  
MATHEMATICS DEPARTMENT**

**MATH 116  
Elementary Statistics  
2013 FALL**

**COURSE OUTLINE**

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

This course is mainly for students in criminal justice, dental hygiene, social sciences and general arts. Topics include descriptive statistics, probability and probability models, one- and two-sample inferences for population means and proportions, simple linear correlation and regression, categorical data analyses.

**1. Instructor Information**

(a)	Instructor:	Susan Kinniburgh
(b)	Office:	E266
(c)	Phone:	250-370-3504
(d)	Email:	KinniburghS@camosun.bc.ca
(e)	Desire2Learn page	<a href="http://online.camosun.ca/">http://online.camosun.ca/</a>
(f)	Office Hours:	M W 4:30-5:20, Tu 3:30-4:20, Th F 2:30-3:20

**2. Intended Learning Outcomes**

The prerequisite is a C or higher in Principles of Math 11, or Applications of Math 11, or MATH 072, or MATH 135, or assessment. Upon completion of this course the student will be able to:

1. Identify problems in our society for which statistical analyses are suitable.
2. Compute and interpret descriptive statistics.
3. Solve basic probability problems. Distinguish between continuous and discrete probability distributions. Perform calculations involving various probability distributions including Binomial and Normal distributions.
4. Estimate the population mean and population proportion, and determine sample size.
5. Estimate the difference between two means, or two proportions.
6. Test hypotheses about a mean, a proportion, a difference of two means, or a difference of two proportions.
7. Perform basic correlation and simple linear regression analysis.
8. Perform basic categorical data analysis.
9. Perform basic statistical data analysis with the aid of a computer software package.

**3. Required Materials**

(a)	<b>Texts</b>	<b>Textbook</b> Bluman and Mayer, Elementary Statistics, Second Edition, McGraw-Hill Ryerson, 2011
(b)	<b>Other</b>	A Sharp EL-531 Scientific Calculator. <i>No other calculators are allowed for tests and the final examination.</i>

## 4. Course Content and Other Course Information

### Course Content

We will cover Chapters 1-11 in the textbook. The approximate schedule of topics is given in the Pace Schedule.

### Excel Labs

This course includes computer lab sessions designed to familiarize students with the use of a computer program to perform data analysis and the procedure of reporting data analysis results. Microsoft Excel with add-ins will be used for this purpose. The lab instructions along with lab assignments can be found on D2L/Content/Labs.

### Homework

*"I hear and I forget. I see and I remember. I do and I understand."* There are two sets of homework assignments for this course. Set #1 consists of Assignment Worksheets. They will be submitted for credit. Set #2 is a list of exercise problems from the textbook. Answers for these problems are given in the textbook. Solutions are available in the student solutions manual. *In order to get a full understanding of the course materials, it is necessary to complete both sets of homework. It is essential to do homework after every class and to keep up consistently. **Cramming does not work for this course, unfortunately.***

### Tests and Practice Tests

There will be three tests. Before each of the 3 tests, there will be a practice test. You are encouraged to ask questions and to work together with peers during these practice test sessions. The practice tests and their solutions are posted on Desire2Learn. *You will benefit most from these practice tests if you have all notes reviewed, all homework problems completed and a summary sheet made before you attempt the problems.*

### Attendance

*Attendance is required.* Showing up to classes is the easiest and most important thing you can do to help you succeed the course. 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).

### 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>

e.g., John Smith, birthday: April 7, 1989

**Username:** firstname.lastname-date-of-birth

Username: john.smith07

**Password:** MMDDYY of your birthdate

Password: 040789

## 5. Basis of Student Assessment (Weighting)

Assignments and Labs	20%
3 Tests	40%
Lab Final	10%
Cumulative Final Exam (3 hrs)	30%

Please refer to the **Pace Schedule** for tentative *tests dates* and lab/homework *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* the instructor is notified *before* the event. NO late assignments will be accepted for credit. Final examinations will be scheduled by the college and they will take place during December 9-17. You must be available to write the final examination at the scheduled time. Holidays or scheduled flights are not considered as emergencies.**

## 6. 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)		

## 7. 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](http://camosun.bc.ca).