

	<p>School of Arts & Science MATHEMATICS DEPARTMENT</p> <p>MATH 219-1 Probability and Statistics 2 2011 Winter</p>
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COURSE OUTLINE

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

1. Instructor Information

(a)	Instructor:	Susan Chen
(b)	Location:	E260
(c)	Phone:	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:	10:30 – 11:30 AM Monday – Friday

2. Intended Learning Outcomes

Upon completion of this course the student will be able to:

1. Perform analysis of paired data.
2. Make inferences concerning a difference between population proportions.
3. Make inferences concerning a population variance, or two population variances.
4. Make inferences concerning more than two population means (analysis of variance) with a single factor or with two factors.
5. Compute Type I error, Type II error, or the power of a hypothesis test.
6. Perform correlation and regression analyses, and make inferences about parameters and predictions.
7. Perform basic categorical data analysis.
8. Perform basic non-parametric data analysis.

3. Required Materials

(a)	Texts	Text: Devore, Jay L., <i>“Probability and Statistics for Engineering and the Sciences”</i> , 7th edition, 2004 Lab Manual: Chen, <i>“Math 219 Lab Manual”</i> , Camosun College Print Shop.
(b)	Other	A Sharp EL-531 Scientific Calculator. <i>No other calculators are allowed for tests and the final examination.</i>

4. Course Content and Schedule

<u>Topic</u>	<u>Sections</u>
Unit 1. Review: Confidence Intervals and Tests of Hypotheses	7.1-7.3, 8.1-8.5, 9.1-9.2
Unit 2. Confidence Intervals for the Variance	7.4 plus supplementary notes
Unit 3. Inference Based on Two Samples	9.3 – 9.5
Unit 4. The Analysis of Variance	10.1 - 10.3
Unit 5. Multifactor Analysis of Variance	11.1 - 11.2
Unit 6. Simple Linear Regression and Correlation	12.1 - 12.5
Unit 7. Analysis of Categorical Data	14.1 - 14.3
Unit 8. Distribution-Free Procedures	15.1 - 15.2, 15.4
Unit 9. Nonlinear and Multiple Regression	13.1 – 13.5 time permitting

Desire2Learn (D2L): This class has the assistance of D2L, an online course management system. Every student registered for this class has access to D2L.

Login Site: <http://online.camosun.ca>.

Username: **firstname.lastname-date-of-birth, e.g., john.smith07.**

Password: **MMDDYY** of your birthday *if this is the first time for you to use D2L.*

If you have used D2L at Camosun College before, then your password is the same as the last time you had used.

For example, John Smith (born on March 7, 1991) has username **john.smith07** and password **030791**.

All course related materials, such as slides, practice tests and their answers, marks, and announcements will be available on D2L. It is your responsibility to check it regularly.

Minitab Labs: This course includes 7 Minitab lab sessions designed to familiarize students with the use of a computer as a tool for statistical analysis. *You must have the Math 219 Lab Manual for each lab.* A lab assignment will be assigned for each lab session. All lab assignments are due in class, six days after they are assigned on the lab day. No late assignments will be accepted for credit. Understanding each lab is essential for succeeding the Lab Final Examination.

Homework: There are two sets of homework assignments for this course. Set #1 consists of Assignment Worksheets and is to be submitted for credit. Set #2 consists of a list of problems from the textbook with answers given in the book. In order to get a full understanding of the course materials you need to do both sets of homework.

5. Basis of Student Assessment (Weighting)

Score 1		Score 2	
Labs and assignments	15%	Lab Final	10%
Tests	35%	Cumulative Final Exam (3 hrs)	90%
Lab Final	10%		
Cumulative Final Exam (3 hrs)	40%		

To earn an A+ in the course, you must obtain at least 90% on both Score 1 and Score 2. For all other grades, your course grade will be the higher of Score 1 and Score 2 if all homework and lab assignments have been completed in a satisfactory manner and your attendance has been excellent; otherwise, your course grade will be Score 1. *Note that in order to pass this course (D or higher), you must obtain a final examination score of at least 40%.*

Please refer to the **Pace Schedule** for dates of *tests and labs*, and lab assignments *due dates*.

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

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.