CAMOSUN COLLEGE	***School of Arts & Science*** ***MATHEMATICS DEPARTMENT*** **MATH 219-1** **Probability and Statistics 2** **2013 Winter**

COURSE OUTLINE

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:	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

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, and two population variances.
4.   Make inferences concerning more than two population means (analysis of variance) with a single factor and 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., *"Probability and Statistics for Engineering and the Sciences",* 8th edition, 2012 Lab Manual: Chen, *"Math 219 Lab Manual"* on D2L.
(b)	Other	A Sharp EL-531 Scientific Calculator. *No other calculators are allowed for tests and the final examination.*

4.   Course Content and Schedule

Topic	Sections
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. 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.lastname*date-of-birth*
Password: MMDDYY of your birthdate

e.g., John Smith, birthday: April 7, 1989
    Username: john.smith07
    Password: 040789

Minitab Labs: This course includes 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 D2L Dropbox. 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 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.

5. Basis of Student Assessment (Weighting)

Score 1

Labs and Assignments	15%
Tests	35%
Lab Final	10%
Cumulative Final Exam (3 hrs)	40%

Score 2

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

Your final grade will be the higher of Score 1 and Score 2 if all homework and lab assignments have been completed and submitted on time. Otherwise, your final grade will be Score 1. Please refer to the **Pace Schedule** for tentative *test dates*, lab and assignment *due dates*, and material coverage plan.

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. <u>NO</u> 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.

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.