CAMOSUN COLLEGE	**School of Arts & Science** **MATHEMATICS DEPARTMENT** **MATH 219** **Probability and Statistics 2** **Winter 2012**

COURSE OUTLINE

The course description is online @ http://camosun.ca/learn/calendar/current/web/math.html

☐ *Please note: the College electronically stores this outline for five (5) years only.*
*It is **strongly recommended** you keep a copy of this outline with your academic records.*
You will need this outline for any future application/s for transfer credit/s to other colleges/universities.

1. Instructor Information

(a)	Instructor:	Susan Chen		
(b)	Office Hours:	13:30 – 14:30 Monday to Friday		
(c)	Location:	E260		
(d)	Phone:	250-370-3497	Alternative Phone:	
(e)	Email:	chen@camosun.ca		
(f)	Website:	http://sites.google.com/site/susanstats/		

2. Intended Learning Outcomes

(No changes are to be made to these Intended Learning Outcomes as approved by the Education Council of Camosun College.)

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: Devore, Jay L., "*Probability and Statistics for Engineering and the Sciences",* 8th edition, 2011.
(b) Other: Chen, "*Math 218 Lab Manual*", Sharp EL-531 Scientific Calculator.

4. Course Content and Schedule

(This section can include: class hours, lab hours, out of class requirements and/or dates for quizzes, exams, lectures, labs, seminars, practicums, etc.)

	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

Please refer to Pace Schedule for Minitab Lab dates, assignment due dates, test dates, and material coverage.

5. Basis of Student Assessment (Weighting)

(a) Labs and Assignments 15%

(b) Quizzes 35%

(c) Lab Final Examination and Final Examination 50%

6. Grading System

Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	A		8
80-84	A-		7
77-79	B+		6
73-76	B		5
70-72	B-		4
65-69	C+		3
60-64	C		2
50-59	D	Minimum level of achievement for which credit is granted; a course with a "D" grade cannot be used as a prerequisite.	1
0-49	F	Minimum level has not been achieved.	0

Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy E-1.5 at **camosun.ca** for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	*Incomplete*: A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	*In progress*: A temporary grade assigned for courses that, due to design may require a further enrollment in the same course. No more than two IP grades will be assigned for the same course. *(For these courses a final grade will be assigned to either the 3rd course attempt or at the point of course completion.)*
CW	*Compulsory Withdrawal:* A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.

7. Recommended Materials or Services to Assist Students to Succeed Throughout the Course

LEARNING SUPPORT AND SERVICES FOR STUDENTS

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.ca.

STUDENT CONDUCT POLICY

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 the College web site in the Policy Section.

ADDITIONAL COMMENTS AS APPROPRIATE OR AS REQUIRED