



School of Arts & Science
MATHEMATICS DEPARTMENT

MATH 219-1
Probability and Statistics 2
2008W

COURSE OUTLINE

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

Please note: this outline will be electronically stored for five (5) years only.
It is strongly recommended students keep this outline for your records.

1. Instructor Information

(a)	Instructor:	Susan Chen
(b)	Location:	E260
(c)	Phone:	370-3497
(d)	Email:	chen@camosun.bc.ca
(e)	Webpage:	http://chen.disted.camosun.bc.ca
(f)	Desire2Learn page	http://online.camosun.ca/
(g)	Office Hours:	On my webpage, Math 219 Desire2Learn , and my office door.

2. Intended Learning Outcomes

(No changes are to be made to this section, unless the Approved Course Description has been forwarded through EDCO for approval.)

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., "Probability and Statistics for Engineering and the Sciences", Sixth edition, 2004 Lab Manual: Chen, "Math 219 Lab Manual", Camosun College Print Shop.
(b)	Other	A Sharp EL-531 Scientific Calculator.

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 who is registered for this class has access to it via website: <http://online.camosun.ca>. Your **username** is: **firstname.lastname-date-of-birth**. E.g., **john.smith07** is the username for John Smith who was born on Feb 7th. Your initial **password** is: **changeme**. All course related materials, such as practice tests, tests answers, your marks, lab assignments dropbox, announcements etc. will be available on D2L. It is your responsibility to check it regularly.

Minitab Labs: This course includes lab sessions designed to familiarize students with the use of a computer as a tool for statistical analysis. The software package to be used is MINITAB. You must have the Math 219 Lab Manual for each lab. The required lab manual is available in the bookstore at Lansdowne Campus. 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.

Calculator: The Sharp EL-531 scientific calculator is required. (The model number on the packaging might be EL-531W.) This is the **only** calculator that will be allowed for tests and examinations. This calculator is available at the Lansdowne Bookstore, and many other stores.

Homework: There are two sets of homework assignments for this course. Set #1 consists of eight (8) Assignment Worksheets. These assignments will be collected and marked for credit. Set #2 consists of a list of problems from the textbook. These are for you to practice to get a better understanding of this course (and therefore a better grade).

5. Basis of Student Assessment (Weighting)

A tentative schedule for the tests and their percentages as that of the final grade is given in the table below. Each test covers material learned between this test and the previous test. The final exam covers all materials. A student's evaluation may be solely based the results of the final examinations provided that all homework and lab-assignments are completed satisfactorily.

All tests must be written during the scheduled period and no late hw/assignments will be accepted for credit. Final examinations will be held during April 14-19 and April 21-22. You must be available to write the final examination at the scheduled time.

Test 1	Tuesday, week 4, January 29	10%
Test 2	Tuesday, week 9, March 4	10%
Test 3	Tuesday, week 14, April 8	10%
Lab Assignments and Homework		20%
Lab Final Exam	Week 13	10%
Final Exam	TBA	40%

Final Grade = the higher of (Score1, Score2)

where Score1 = 20%(hw/lab) + 30% (tests) + 10%(lab final) + 40%(final exam)

Score2 = 10%(lab final) + 90%(final exam) *if all lab/hw were completed satisfactorily, otherwise 0.*

6. Grading System

Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
95-100	A+		9

90-94	A		8
85-89	A-		7
80-84	B+		6
75-79	B		5
70-74	B-		4
65-69	C+		3
60-64	C		2
50-59	D		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 at camosun.ca or information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	<i>Incomplete:</i> 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	<i>In progress:</i> A temporary grade assigned for courses that are designed to have an anticipated enrollment that extends beyond one term. No more than two IP grades will be assigned for the same course.
CW	<i>Compulsory Withdrawal:</i> 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.

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.

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 on the College web site in the Policy Section.