



School of Arts & Science – Mathematics Department
MATH 116 (Elementary Statistics)
SPRING 2007

The Approved Course Description is available on the Internet at
<http://www.camosun.bc.ca/calendar/current/web/math.html>
It is strongly recommended that you keep this outline for your records.

1. Instructor Information

Instructor:	Sofia Mosesova
Office:	E266
Office Hours:	Monday, Wednesday and Thursday 4:30-5:30pm
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Website:	

2. Prerequisites

C+ in MATH 072 or Math 11, or a C in MATH 073 or Math 12 or Applications of Math 12 or assessment.

3. Course Objectives

Upon completion of this course you should 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 a computer software package.

4. Required Materials

1. Elementary Statistics (2nd Cdn edition), Triola, Goodman, and Law. Addison – Wesley, 2002.
2. Math 116 Lab Manual, Calver, Chen, and Salloum. Camosun College Print Shop.
3. Sharp EL – 531 Calculator (only calculator allowed for tests and examinations)

5. Grade Allocation

Percentage grades will be converted to letter grades as follows:

A+ [95, 100]	B+ [80, 85]	C+ [65, 70]	F [0, 50]
A [90, 95]	B [75, 80]	C [60, 65]	
A- [85, 90]	B- [70, 75]	D [50, 60]	

Note that June 6th, 2007 is the last day to withdraw from this course without a failing grade appearing on your transcript. If you desire a grade of *Audit* in the course, you will need to make this change by June 6th, 2007.

6. Evaluation

Score 1		Score 2	
4 Assignments / 5 Labs	20%	Take home Lab Final	10%
3 Tests (50 min each)	30%	Cumulative Final Exam (3 hrs)	90%
Take home Lab Final	10%		
Cumulative Final Exam (3 hrs)	40%		

Your final grade will be the maximum of Scores 1 and 2 if all homework and lab assignments have been completed and submitted on time. Otherwise, your final grade will be Score 1.

A tentative schedule for the homework assignments and tests is given below:

A1	T1	A2	T2	A3	T3	A4
May 14	May 17	May 28	May 31	June 11	June 14	June 20

7. Tentative Syllabus

Introduction	1.1 – 1.4
Descriptive Statistics	2.1 – 2.7
Probability	3.1 – 3.4, 4.1 – 4.4
Normal Probability Distributions	5.1 – 5.6
Estimates and Sample Sizes	6.1 – 6.4
Hypothesis Testing	7.1 – 7.5
Correlation and Regression	9.1 – 9.3
Chi – Square Tests	10.1 – 10.3
Tests Comparing Two Parameters	8.1 – 8.3, 8.6

8. Labs and Assignments

This course includes five lab sessions held every Tuesday in E103 designed to familiarize you with the use of a computer as a tool for statistical analysis. The computer software we use is Statistics Program for Social Scientists (SPSS). **You must have a computer account and lab manual ready before your first lab.** Each lab session includes a lab assignment to be handed in a week after your lab day.

There will also be four homework assignments due at the beginning of class on the due dates given above. The problems required for these assignments will be available on my website approximately one week before they are due. They should be neat and stapled. **Late assignments will not be accepted as I post the assignment solutions on my website shortly after class.**

9. Attendance

Showing up to class is arguably the easiest and most important thing you can do to help your college experience. **Keeping up is an essential part of any statistics course as much of the material builds on itself.** If you feel yourself falling behind at any point during the term, then please do not hesitate to come speak to me. Also, there are two math help centers on the Lansdowne campus staffed by instructional assistants available for free for students who would like help or would like to work with others. They are located in rooms E224 and E342.

If you are unable to attend class during a test, then make sure to inform me in advance. Unless an appropriate reason is provided (with supporting documents) for your absence, you will receive a grade of zero. Classes end on June 21st, but the final exam may be scheduled up to June 27th. Please do not schedule to be away prior to that date.

LEARNING SUPPORT AND SERVICES FOR STUDENTS

There are a variety of services available to assist you throughout your 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, Student Services, and on the College web site in the Policy Section.