

School of Arts & Science – Mathematics Department MATH 216 – 001 (Applied Statistics) WINTER 2008

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:	Geoff Salloum
Office:	E266
Office Hours:	I have at least one hour set aside everyday. Please find them on my website.
Email:	salloumg@camosun.bc.ca
Phone:	250.370.3504
Website:	http://gsalloum.googlepages.com
Class Times:	0830 – 0920 Monday, Wednesday, Thursday, Friday in E346.
	0830 – 0920 on some Tuesdays (see lab schedule below) in E100 and E103.

2. Prerequisites

Math 12 or assessment.

3. Course Objectives

Upon completion of this course you should be able to:

- 1. Compute and interpret descriptive statistics.
- 2. Perform calculations that apply the basic properties and concepts of probability.
- 3. Make statistical inferences for one population and two populations.
- 4. Make statistical inferences for more than two populations (ANOVA).
- 5. Apply the technique of linear regression in circumstances where appropriate and assess the usefulness of a linear model in these situations using the concept of correlation.
- 6. Apply basic methods to analyze categorical data.
- 7. Use the statistical software MINITAB to perform basic data analysis.

4. Required Materials

- 1. Introduction to the Practice of Statistics (5th edition), Moore and McCabe. Freeman, 2006.
- 2. Math 216 Lab Manual, Calver and Salloum. (Camosun College Print Shop or free on my website)
- 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+	[90, 100]	B+	[77, 80)	C+	[65, 70)	F	[0, 50)
А	[85, 90)	В	[73, 77)	С	[60, 65)		
A-	[80, 85)	B-	[70, 73)	D	[50, 60)		

Note that March 10, 2008 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 March 10, 2008.

6. Evaluation

Score 1

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

Score 2

Take home Lab Final10%Cumulative Final Exam (3 hrs)90%

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. Note that in order to pass this course (D or higher), you must obtain a final examination score of 40% or higher.

A tentative schedule for the test dates and assignment due dates is given below:

[A1	T1	A2	T2	A3	Т3	A4
	Jan 25	Feb 1	Feb 22	Feb 29	Mar 20	Mar 28	Apr 10

7. Tentative Syllabus

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Looking at Data - Distributions	1.1 – 1.3
Looking at Data - Relationships	2.1 – 2.5
Producing Data	Selections from Chapter 3
Probability – The Study of Randomness	4.1 – 4.5
Sampling Distributions	5.1 – 5.2 and Poisson handout
Introduction to Inference	6.1 – 6.3
Inference for Distributions	7.1 – 7.2
Inference for Proportions	8.1 - 8.2
Analysis of Two-Way Tables	9.1 – 9.4
Inference for Regression	10.1
Analysis of Variance	12.1

8. Labs and Assignments

This course includes 5 lab sessions held on some Tuesdays (Jan 15, Jan 22, Feb 5, Mar 4, and Mar 25) in the computer labs E100 and E103. The labs are designed to familiarize you with the use of a computer as a tool for statistical analysis. The computer software we use is Minitab 14 (or 15). Each lab session includes a lab assignment to be handed in 8 days 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.

There will be no rewrites for missed tests. If a test is missed for any reason, then the 10% of your final grade allocated to that test will be added onto your final exam provided that you do well on the missed material on the final exam. Finally, be sure not to schedule anything for April until you know your exam schedule. It is possible to have an exam up to and including April 22, 2008.

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.