C A M O S U N COLLEGE	**School of Arts & Science** **MATHEMATICS DEPARTMENT** **MATH 216** **Applied Statistics** **Quarter or Semester/Year**

COURSE OUTLINE

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

Ω   *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:	Eric Cormier
(b)	Office:	E266
(c)	Phone:	250-370-3504
(d)	Email:	cormiere@camosun.bc.ca
(e)	Office Hours:	To be announced

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.   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.

3.   Required Materials

(a)   Texts: Introduction to the Practice of Statistics (6th edition), Moore, McCabe and Craig. Freeman, 2009.

(b)   Other: Math 216 Lab Manual, Chen and Salloum.

4.   Course Content and Schedule

Looking at Data - Distributions	*1.1 – 1.3*
Looking at Data – Relationships	*2.1 – 2.5*
Producing Data	*3.1 – 3.4*
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*

Minitab Labs: This course includes 6 lab sessions. You will need the lab manual for each lab, except for the Lab Intro. The lab manual is available at the book store. **The labs will be held in the computer lab E115** *on:* **Sept 7, Sept 14, Sept 28, Oct 12, Nov 2, and Nov 23.** *There will be a* **Lab Final** *on* **Nov 30th** *.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 16. Each lab session includes a lab assignment to be submitted 6 days after your lab day. There will be a lab final exam in the last week of classes.*

Homework Assignments: "I hear, I forget. I do, I understand." There will be **4** *homework assignments due at the beginning of class on the four scheduled dates. The problems required for these assignments will be available approximately one week before they are due. They should be neat and stapled.* **Late assignments will not be accepted.** *There will also be a set of* **suggested problems** *from the textbook. Answers for most of these problems are in the back of the textbook, and full solutions for all will be posted. In order to get a full understanding of the course materials you need to do both sets of homework. The key for getting a full understanding (and therefore a good grade) in a Statistics course is to do homework after every class and to keep up consistently. Cramming does not work for this course, unfortunately.*

Attendance: Attendance is required. Showing up to class is the easiest and most important thing you can do to help succeed the course. 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. **Only Students with good attendance will be eligible for the "100% final" option (see Item 5, Score 2).**

Math Labs: There are two math labs (help centers), **E224** *and* **E342** *(mainly for access courses), on the Lansdowne campus staffed by instructional assistants available for free for students who would like help or would like to work with others.*

5.   Basis of Student Assessment (Weighting)
(This section should be directly linked to the Intended Learning Outcomes.)

(a)   Assignments/Labs   15%

(b)   Tests   35%

(c)   Exams   40%

(d)   Lab Final   10%

6.   Grading System
(No changes are to be made to this section unless the Approved Course Description has been forwarded through the Education Council of Camosun College for approval.)

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