

# School of Arts & Science MATHEMATICS DEPARTMENT MATH 116 Section 1 Elementary Statistics Winter 2012

# **COURSE OUTLINE**

The course description is online @  $\underline{\text{http://camosun.ca/learn/calendar/current/web/math.html}}$ 

☐ 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. Identify problems in our society for which statistical analyses are suitable.
- 2. Compute and interpret descriptive statistics.
- 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.
- 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 the aid of a computer software package.

## 3. Required Materials

- (a) Texts: De Veaux, Velleman and Bock, Intro Stats, Second or Third Edition, Pearson Addison Wesley, 2009
- (b) Other: Math 116 Lab Manual, Camosun College Print Shop, 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.)

#### **Course Content**

<u>Topic</u>	<b>Chapters</b>
Exploring and Understanding Data	1- 6
Exploring Relationships Between Variables	7- 9
Gathering Data	12 - 13
Randomness and Probability	14 - 17
From the Data at Hand to the World at Large	
(Inference about proportions)	18 - 22
Learning about the World	
(Inference about means)	23 - 25
Inference When Variables are Related	26

Please refer to Pacing Schedule for SPSS Lab dates, assignment due dates, test dates, and material coverage.

## 5. Basis of Student Assessment (Weighting)

(This section should be directly linked to the Intended Learning Outcomes.)

(a) Clicker, Assignments and Labs
(b) Quizzes
(c) Lab Final Exam
(d) Final Exam
30%

#### 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	Α		8
80-84	A-		7
77-79	B+		6
73-76	В		5
70-72	B-		4
65-69	C+		3
60-64	С		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
ı	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 3 <sup>rd</sup> 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 <a href="mailto:camosun.ca">camosun.ca</a>.

## 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