

# CAMOSUN COLLEGE School of Arts & Science Department of Mathematics & Statistics

# STAT-116-001 Elementary Statistics Summer 2018

# **COURSE OUTLINE**

The course description is available on the web @ http://camosun.ca/learn/calendar/current/web/stat.html

 $\Omega$  Please note: This outline will not be kept indefinitely. It is recommended students keep this outline for their records, especially to assist in transfer credit to post-secondary institutions.

# 1. Instructor Information

(a)	Instructor	Fan Wu		
(b)	Office hours	Mon-Thurs 10:30-11:30		
(c)	Location	E266		
(d)	Phone 250-	-370-3504	Alternative:	
(e)	E-mail	wuf@camosun.bc.ca		
(f)	Website	http://webworklans.camosuhttp://online.camosun.ca/	n.ca/webwork2/Stat116-Summer2018/	

# 2. Intended Learning Outcomes

Upon completion of this course a 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.
- 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 the aid of a computer software package.

# 3. Required Materials

(a)	Texts	Texts: Diaz, Barr, & Cetinkaya-Rundel; OpenIntro Statistics 3rd Ed.	
		You can download or find a copy for purchase: https://www.openintro.org/stat/textbook.php?stat_book=os	
(b) Other  A Sharp EL-531 Scientific Calculator. No other calculators are alleasts and the final examination.		A Sharp EL-531 Scientific Calculator. No other calculators are allowed for tests and the final examination.	
		Lab manual: available for download on D2L	

#### 4. Course Content and Schedule

#### **Excel Labs**

This course includes computer lab sessions designed to familiarize students with the use of a computer program to perform data analysis and the procedure of reporting data analysis results. Microsoft Excel will be used for this purpose. The lab instructions along with lab assignments can be found on D2L.

#### Homework

The homework for this course will include 1) **Hard copy written** assignments, 2) **Lab** assignments, 3) **Online WeBWorK** assignments, and 4) Suggested problems from the textbook (answers for these problems are given in the textbook and solutions are available online via the link provided on D2L). In order to get a full understanding of the course materials, it is necessary to complete both sets of homework. It is essential to do homework after every class and to keep up consistently. **Cramming does not work for this course.** 

#### **Tests and Practice Tests**

There will be three tests. Before each of the 3 tests, there will be a practice test. You are encouraged to ask questions and to work together with peers during these practice test sessions. The practice tests and their solutions are posted on Desire2Learn. You will benefit most from these practice tests if you have all notes reviewed, all homework problems completed and a summary sheet made before you attempt the problems.

#### **Attendance**

Attendance is essential. Showing up to classes is the easiest and most important thing you can do to help you 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 to speak to me.

#### Math Lab

You can get **free face-to-face tutoring** from our instructional assistant in the Math Lab **E224.** Lab hours are posted on the lab doors and on the Math Department page <a href="http://camosun.ca/learn/programs/math/">http://camosun.ca/learn/programs/math/</a>. Find out what hours work for you best (when the lab is the least busy).

#### Desire2Learn (D2L)

This class has the assistance of D2L, an online course management system. All course related materials, such as slides, Lab materials, practice tests and their answers, grades, discussion forum and announcements will be available on D2L. It is your responsibility to check it regularly.

D2L URL: http://online.camosun.ca

# 5. Basis of Student Assessment (Weighting)

Assignments (Hand in and Webwork)	
Lab Assignments	
3 Tests	
Lab Final	
Cumulative Final Exam (3 hrs)	

Please refer to the **Schedule** on D2L for tentative tests dates and lab/homework due dates.

All tests must be written during the scheduled times. In the event that you missed a test or did poorly on a test due to family emergency or illness, the weight of the test will be put on the final exam *if* the instructor is notified *immediately*. Final examinations will be scheduled by the college and they will take place during Aug 2017. You must be available to write the final examination at the scheduled time. Holidays or scheduled flights are not considered as emergencies.

# 6. Grading System

X	Standard Grading System (GPA)
	Competency Based Grading System

# 7. Recommended Materials to Assist Students to Succeed Throughout the Course

The Department of Mathematics and Statistics has prepared a handout called <u>Student Guidelines for Academic Integrity</u> to help you to interpret college policies involving student conduct, academic dishonesty, plagiarism, etc. It is your responsibility to become familiar with the contents of the document and the college policies it references.

# 8. College Supports, Services and Policies

#### Immediate, Urgent, or Emergency Support

If you or someone you know requires immediate, urgent, or emergency support (e.g. illness, injury, thoughts of suicide, sexual assault, etc.), **SEEK HELP**. Resource contacts @ <a href="http://camosun.ca/about/mental-health/emergency.html">http://camosun.ca/about/mental-health/emergency.html</a> or <a href="http://camosun.ca/services/sexual-violence/get-support.html#urgent">http://camosun.ca/services/sexual-violence/get-support.html#urgent</a>

#### **College Services**

Camosun offers a variety of health and academic support services, including counselling, dental, disability resource centre, help centre, learning skills, sexual violence support & education, library, and writing centre. For more information on each of these services, visit the **STUDENT SERVICES** link on the College website at <a href="http://camosun.ca/">http://camosun.ca/</a>

## **College Policies**

Camosun strives to provide clear, transparent, and easily accessible policies that exemplify the college's commitment to life-changing learning. It is the student's responsibility to become familiar with the content of College policies. Policies are available on the College website at <a href="http://camosun.ca/about/policies/">http://camosun.ca/about/policies/</a>. Education and academic policies include, but are not limited to, Academic Progress, Admission, Course Withdrawals, Standards for Awarding Credentials, Involuntary Health and Safety Leave of Absence, Prior Learning Assessment, Medical/Compassionate Withdrawal, Sexual Violence and Misconduct, Student Ancillary Fees, Student Appeals, Student Conduct, and Student Penalties and Fines.

### A. GRADING SYSTEMS http://camosun.ca/about/policies/index.html

The following two grading systems are used at Camosun College:

#### 1. 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		1
0-49	F	Minimum level has not been achieved.	0

# 2. Competency Based Grading System (Non GPA)

This grading system is based on satisfactory acquisition of defined skills or successful completion of the course learning outcomes

Grade	Description	
СОМ	The student has met the goals, criteria, or competencies established for this course, practicum or field placement.	
DST	The student has met and exceeded, above and beyond expectation, the goals, criteria, or competencies established for this course, practicum or field placement.	
NC	The student has not met the goals, criteria or competencies established for this course, practicum or field placement.	

# **B.** 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 <a href="http://camosun.ca/about/policies/index.html">http://camosun.ca/about/policies/index.html</a> 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 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	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.	