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

STAT-116-D03
Elementary Statistics
Fall 2020

COURSE OUTLINE

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

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.

Attendance Note

Dear Students, the first information that you will need to submit is an attendance note, whether you are in the class or on the waitlist. **Please e-mail a note to me at chen@camosun.bc.ca with the subject line ATTENDANCE to confirm your attendance by 5 pm on Tuesday, Sept 8**. This is important as this attendance note will hold your space in the course. To ensure that waitlisted students will have a chance to take the course, I will begin the deregistration process for students who have not submitted the attendance note by Wednesday Sept 9.

In your attendance note, please introduce yourself in about a paragraph:

- Your name and student number
- Which section of STAT 116 are you attending or waitlisted for?
- Are you located in Canada or elsewhere?
- Why are you taking STAT 116 or wishing to take it?
- Anything else?

I will need the note itself to confirm your attendance.

1. Instructor Information

(a) Instructor	Susan Chen
(b) Office hours	Office Hours: Tu 11:30 - 12:00, W 10:30 - 12:00 & 3:30 - 4:30 & Th 10:30 - 12:00 & 3:30 - 4:30 in Collaborate
(c) Location	Collaborate through D2L
(d) Phone	250-370-3497
(e) E-mail	chen@camosun.bc.ca
(f) Website	http://online.camosun.ca

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.
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 the aid of a computer software package.

3. Required Materials

(a) Texts

1) Open Source PDF textbook: OpenIntro Statistics 4th edition by David M Diez et al. Free download at https://www.openintro.org/stat/textbook.php. Hard copies are sold in the Camosun Bookstore at Lansdowne.
2) Skeleton Notes, available in the Lansdowne Bookstore and in D2L
3) *STAT 116 Excel Lab tutorial manuals*, available in D2L.

(b) Other

A *Sharp EL-531 Scientific Calculator*, or an online Statistics Calculator, e.g.,
1) for computing Mean and Standard Deviation: https://www.calculator.net/statistics-calculator.html
2) for Regression Equation: https://www.socscistatistics.com/tests/regression/default.aspx

4. Course Content and Schedule

Lecture Tu 9:30 - 11:20 AM, Th 13:30 - 15:20 PM in Collaborate
Labs W 9:30 - 10:20 in weeks 2, 4, 6, 8, 10, 12, 14 on your own computer with support in Collaborate

For tests and assignments dates, as well as Important dates, please refer to the Course Calendar.

Course Content

Topic	Chapter	Dates
Introduction to Data	1	Sept 8-10, 2020
Summarizing Data	2	Sept 10-17, 2020
Probability	3	Sept 29 – Oct 8, 2020
Distributions of Random Variables	4	Oct 13 -22, 2020
Foundations for Inference	5	Oct 27-29, 2020
Inferences for Categorical Data	6	Nov 24 - Dec 8, 2020
Inferences for Numerical Data	7	Oct 29-Nov 19, 2020
Introduction to Linear Regression	8	Sept 22-24, 2020

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 with

add-ins Data Analysis ToolPak will be used for this purpose. The lab tutorials which also contains lab assignments can be found in D2L/Content/Labs.

Homework: "*I hear and I forget. I see and I remember. I do and I understand.*" The homework for this course will include 1) Online MyOpenMath assignments, 2) Lab assignments, and 3) Suggested practice problems from the textbook. *In order to get a full understanding of the course materials, which usually leads to a good grade, it is necessary to complete all the homework on time. It is essential to review the notes and do homework after every class and to keep up consistently. This course is cumulative,* ***cramming does not work.***

Midterms and Reviews
There will be three midterms. Before each of the 3 midterms, there will be a review session and a set of review problems to practice.

Math Lab (Help Centre)
Math lab **E224** is staffed with instructional assistants available for **free** help. Please email themathlabs@gmail.com to arrange an appointment. Lab hours can be viewed at http://camosun.ca/services/help-centres/

Desire2Learn (D2L)
This class has the assistance of D2L, an online course management system. Please visit this open site for D2L tutorials even if you have used D2L before: https://elearningtutorialscamosun.opened.ca/. All course related materials, including course calendar, skeleton notes, lecture notes and videos, lab manuals and data sets, review problem sets and answers, tests solutions, grades, and announcements will be available in D2L. It is your responsibility to subscribe to the notifications on D2L and check the site regularly.

5. Basis of Student Assessment (Weighting)

11 Assignments	25%
6 Labs	15%
3 Midterms	45%
5 Quizzes	10%
Participation (Video Interview, D2L discussions)	5%

All tests must be written during the scheduled times. In the event that you missed a test due to a family emergency or illness, the weight of the test will be put on other exams of the same category *provided* the instructor is notified *before* the test and all assignments are completed satisfactorily. NO late assignments or labs will be accepted.

6. Grading System

[x] Standard Grading System (GPA)

[ ] Competency Based Grading System

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

1) Lecture videos come with the textbook https://www.openintro.org/stat/videos.php
2) Notes and videos made specifically for this course on the D2L course page: online.camosun.ca.

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 @ http://camosun.ca/about/mental-health/emergency.html or http://camosun.ca/services/sexual-violence/get-support.html#urgent

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 http://camosun.ca/

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 http://camosun.ca/about/policies/. 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	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		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
COM	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 http://camosun.ca/about/policies/index.html 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.

For the Important Dates of Fall 2020, please see the Course Calendar handout or visit http://camosun.ca/events/important-dates.html?y=2020