# COURSE SYLLABUS

COURSE TITLE: STAT-116-Elementary Statistics CLASS SECTION: 001

TERM: 2025W

COURSE CREDITS: 3

DELIVERY METHOD(S): In-person lecture



Camosun College respectfully acknowledges that our campuses are situated on the territories of the Ləƙwəŋən (Songhees and Kosapsum) and WSÁNEĆ peoples. We honour their knowledge and welcome to all students who seek education here.

#### **INSTRUCTOR DETAILS**

- NAME: Chedo Barone
- EMAIL: <u>baronec@camosun.ca</u>
- OFFICE: Lansdowne: Ewing 266, Interurban CBA 156

HOURS: Lansdowne: Tuesday 2:30 – 3:20, Friday 10:30-11:20. Interurban: Monday 1:30 – 2:20, Thursday 1:30 – 2:20, or by appointment.

As your course instructor, I endeavour to provide an inclusive learning environment. However, if you experience barriers to learning in this course, do not hesitate to discuss them with me. Camosun College is committed to identifying and removing institutional and social barriers that prevent access and impede success.

#### CALENDAR DESCRIPTION

This course is mainly for students in Criminal Justice, Dental Hygiene, Social Sciences and general arts. Topics include descriptive statistics, probability and probability models, one-and two-sample inferences for population means and proportions, simple linear correlation and regression, categorical data analyses.

PREREQUISITE(S): One of: C in Math 11 C- in Pre-calculus 12 C in MATH 072 C in MATH 075 C in MATH 077 C in MATH 135

C in MATH 137

CO-REQUISITE(S):

EQUIVALENCIES:

MATH 116

## COURSE LEARNING OUTCOMES / OBJECTIVES

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.

# REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

## Texts/Notes:

- Open Source PDF textbook: OpenIntro Statistics 4<sup>th</sup> edition by David M Diez et al. Free pdf download at <u>https://www.openintro.org/stat/textbook.php</u>. Hard copies are sold in the Camosun Bookstore at Lansdowne.
- 2) My projected course notes, which will be posted on D2L.
- 3) STAT 116 Excel Lab tutorial manuals and assignments, posted on D2L.
- Other: A Sharp EL-531 Scientific Calculator

COURSE SCHEDULE, TOPICS, AND ASSOCIATED PREPARATION / ACTIVITY / EVALUATION

The following schedule and course components are subject to change with reasonable advance notice, as deemed appropriate by the instructor.

		*MOMS DUE <b>THURSDAYS</b> BY 11:59 PM	Midterm Tests All on <b>Fridays</b>
WEEK and DATE RANGE	COVERAGE IN		TIME: 9:30AM - 10:20AM
	Техтвоок	**Lab HW due <b>Fridays</b> By	
		11:59 PM	
Week 1, Jan 6 – Jan 10	Day 1 intro,		
	1.1 - 1.4		
Week 2, Jan 13 – Jan 17	2.1, 2.2	MOM 1 (1.1-1.3)	
		Lab intro (in D2L)	
Week 3, Jan 20 – Jan 24	Ch8	MOM 2 (1.4-2.2)	
Week 4, Jan 27 – Jan 31	Ch3	MOM 3(ch8)	
		Lab 1	
Week 5, Feb 3 – Feb 7	Ch3, Review		Midterm 1 (ch1,2,8)
Week 6, Feb 10 – Feb 14	4.1, 4.3	MOM 4(ch3)	
		Lab 2	
Week 7, Feb 17 – Feb 21	Family Day &		
	Reading Break		
Week 8, Feb 24 – Feb 28	4.3, 5.1	MOM 5 (4.1)	
		MOM 6 (4.1, 4.3)	
		Lab 3	
Week 9, Mar 3 – Mar 7	Theoretical	MOM 7 (5.1)	Midterm 2 (ch3,4,5)
	Interlude, Review		
Week 10, Mar 10 – Mar 14	7.1	Lab 4	
Week 11, Mar 17 – Mar 21	7.2, 7.3	MOM 8 (7.1)	
Week 12, Mar 24 – Mar 28	7.5, 6.1	MOM 9 (7.2, 7.3)	
		Lab 5	
Week 13, Mar 31 – Apr 4	6.2, Review		Midterm 3 (ch7,6.1)
Week 14, Apr 7 – Apr 11	6.4	MOM 10 (ch6)	
	Final review		
April 15 - 23	Final Exam Period		

\*MOM = My Open Math online assignments are at <a href="https://www.myopenmath.com">https://www.myopenmath.com</a>,

\*\* Lab HW assignment dropboxes can be found on D2L under the **Assignments** section.

Students registered with the Centre for Accessible Learning (CAL) who complete quizzes, tests, and exams with academic accommodations have booking procedures and deadlines with CAL where advanced noticed is required. Deadlines can be reviewed on the <u>CAL exams page</u>. <u>https://camosun.ca/services/academic-supports/accessible-learning/academic-accommodations-exams</u>

DESCRIPTION	WEIGHTING
10 MOM Assignments	13%
6 Labs	12%
3 Midterms	45%
Final Examination	30%
TOTAL	100%

If you have a concern about a grade you have received for an evaluation, please come and see me as soon as possible. Refer to the Grade Review and Appeals policy for more information.

http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf

# COURSE GUIDELINES & EXPECTATIONS

# 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/Course Tools/Content/Excel Labs.

We will be meeting in **Ewing 115 on Monday from 12:30 – 1:20 in Weeks 2, 4, 6, 8, 10, and 12**. On the oddnumbered weeks we have no lab meeting. During the lab meeting, I will demonstrate some functions on Excel. You will then use those functions to complete that week's Lab Assignment. By the end of the lab meeting, you should have all of your required output for that week's Lab Assignment. Often, there will be students who will have completed the entire assignment by the end of the lab meeting.

There is no need to rush, however. Your lab assignment is not due until the end of the week, on **Friday at 11:59PM**. The assignments will be submitted on D2L. The dropbox for each assignment will be found by clicking **Assignments** at the top of the page.

## Homework

"I hear and I forget. I see and I remember. I do and I understand." The homework for this course includes: 1) MyOpenMath (MOM) online assignments, 2) Lab assignments, and 3) Suggested practice problems from the textbook. To get a full understanding of the course materials, 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 50-minute midterms. Before each of the 3 midterms, there will be a review session and a set of review problems to practice. All three midterms will be held during the second half of the Friday meeting.

- Midterm 1: Friday February 7, 9:30AM 10:20AM
- Midterm 2: Friday March 7, 9:30AM 10:20AM
- Midterm 3: Friday April 4, 9:30AM 10:20AM

## **Missed Tests**

All tests must be written in class during the scheduled times. If you miss a test due to a family emergency or illness, you can be excused from the test. I will use the relevant portion of your final exam to calculate a mark for the missed test. There will not be any rewrites of tests.

# 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: <u>https://elearningtutorialscamosun.opened.ca/</u>. All course related materials and announcements will be available in D2L. It is your responsibility to subscribe to the notifications on D2L and check the site regularly.

## SCHOOL OR DEPARTMENTAL INFORMATION

**Math Lab:** You can get **free tutoring** from our instructional assistants (IA) in the Math Lab which is generally open Monday to Friday. Lab hours can be viewed at <u>http://camosun.ca/services/help-centres/</u>.

## STUDENT RESPONSIBILITY

Enrolment at Camosun assumes that the student will become a responsible member of the College community. As such, each student will display a positive work ethic, assist in the preservation of College property, and assume responsibility for their education by researching academic requirements and policies; demonstrating courtesy and respect toward others; and respecting expectations concerning attendance, assignments, deadlines, and appointments.

## SUPPORTS AND SERVICES FOR STUDENTS

Camosun College offers a number of services to help you succeed in and out of the classroom. For a detailed overview of the supports and services visit camosun.ca/services.

Support Service	Website
Academic Advising	camosun.ca/services/academic-supports/academic-advising
Accessible Learning	camosun.ca/services/academic-supports/accessible-learning
Counselling	camosun.ca/services/health-and-wellness/counselling-centre
Career Services	camosun.ca/services/co-operative-education-and-career- services
Financial Aid and Awards	camosun.ca/registration-records/financial-aid-awards
Help Centres (Math/English/Science)	camosun.ca/services/academic-supports/help-centres
Indigenous Student Support	<u>camosun.ca/programs-courses/iecc/indigenous-student-</u> services
International Student Support	camosun.ca/international

Support Service	Website
Learning Skills	<pre>camosun.ca/services/academic-supports/help- centres/writing-centre-learning-skills</pre>
Library	camosun.ca/services/library
Office of Student Support	camosun.ca/services/office-student-support
Ombudsperson	camosun.ca/services/ombudsperson
Registration	camosun.ca/registration-records/registration
Technology Support	camosun.ca/services/its
Writing Centre	camosun.ca/services/academic-supports/help- centres/writing-centre-learning-skills

If you have a mental health concern, please contact Counselling to arrange an appointment as soon as possible. Counselling sessions are available at both campuses during business hours. If you need urgent support after-hours, please contact the Vancouver Island Crisis Line at 1-888-494-3888 or call 911.

# COLLEGE-WIDE POLICIES, PROCEDURES, REQUIREMENTS, AND STANDARDS

## Academic Integrity

Students are expected to comply with all College policy regarding academic integrity; which is about honest and ethical behaviour in your education journey. The following guide is designed to help you understand your responsibilities: <u>https://camosun.libguides.com/academicintegrity/welcome</u> Please visit <u>https://camosun.ca/sites/default/files/2021-05/e-1.13.pdf</u> for Camosun's Academic Integrity policy and details for addressing and resolving matters of academic misconduct.

## Academic Accommodations for Students with Disabilities

Camosun College is committed to achieving full accessibility for persons with disabilities. Part of this commitment includes arranging appropriate academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all of their academic activities. If you are a student with a documented disability and think you may need accommodations, you are strongly encouraged to contact the Centre for Accessible Learning (CAL) and register as early as possible. Please visit the CAL website for more information about the process of registering with CAL, including important deadlines: <a href="https://camosun.ca/cal">https://camosun.ca/cal</a>

#### Academic Progress

Please visit <u>https://camosun.ca/sites/default/files/2023-02/e-1.1.pdf</u> for further details on how Camosun College monitors students' academic progress and what steps can be taken if a student is at risk of not meeting the College's academic progress standards.

## Course Withdrawals Policy

Please visit <u>https://camosun.ca/sites/default/files/2021-05/e-2.2.pdf</u> for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit https://camosun.ca/registration-records/tuition-fees#deadlines.

#### **Grading Policy**

Please visit <u>https://camosun.ca/sites/default/files/2021-05/e-1.5.pdf</u> for further details about grading.

## Grade Review and Appeals

Please visit <u>https://camosun.ca/sites/default/files/2021-05/e-1.14.pdf</u> for policy relating to requests for review and appeal of grades.

## Medical / Compassionate Withdrawals

Students who are incapacitated and unable to complete or succeed in their studies by virtue of serious and demonstrated exceptional circumstances may be eligible for a medical/compassionate withdrawal (see <u>Medical/Compassionate Withdrawals policy</u>). Please visit <u>https://camosun.ca/services/forms#medical</u> to learn more about the process involved in a medical/compassionate withdrawal.

## Sexual Violence

Camosun is committed to creating a campus culture of safety, respect, and consent. Camosun's Office of Student Support is responsible for offering support to students impacted by sexual violence. Regardless of when or where the sexual violence occurred, students can access support at Camosun. The Office of Student Support will make sure students have a safe and private place to talk and will help them understand what supports are available and their options for next steps. The Office of Student Support respects a student's right to choose what is right for them. For more information see Camosun's Sexualized Violence Policy: <a href="https://camosun.ca/sites/default/files/2021-05/e-2.9.pdf">https://camosun.ca/sites/default/files/2021-05/e-2.9.pdf</a> and <a href="https://camosun.ca/services/sexual-violence-support-and-education">https://camosun.ca/sites/default/files/2021-05/e-2.9.pdf</a> and <a href="https://camosun.ca/services/sexual-violence-support-and-education">camosun.ca/services/sexual-violence-support-and-education</a>.

To contact the Office of Student Support: oss@camosun.ca or by phone: 250-370-3046 or 250-370-3841

## Student Misconduct (Non-Academic)

Camosun College is committed to building the academic competency of all students, seeks to empower students to become agents of their own learning, and promotes academic belonging for everyone. Camosun also expects that all students to conduct themselves in a manner that contributes to a positive, supportive, and safe learning environment. Please review Camosun College's Student Misconduct Policy at <a href="https://camosun.ca/sites/default/files/2021-05/e-2.5.pdf">https://camosun.ca/sites/default/files/2021-05/e-2.5.pdf</a> to understand the College's expectations of academic integrity and student behavioural conduct.

Looking for other policies? The full suite of College policies and directives can be found here: <u>https://camosun.ca/about/camosun-</u> <u>college-policies-and-directives</u>

**Changes to this Syllabus:** Every effort has been made to ensure that information in this syllabus is accurate at the time of publication. The College reserves the right to change courses if it becomes necessary so that course content remains relevant. In such cases, the instructor will give the students clear and timely notice of the changes.