COURSE SYLLABUS

COURSE TITLE: Elementary Statistics CLASS SECTION: D01 TERM: Summer 2022 COURSE CREDITS: 3 DELIVERY METHOD(S): Online



Camosun College campuses are located on the traditional territories of the Lək^wəŋən and WSÁNEĆ peoples. We acknowledge their welcome and graciousness to the students who seek knowledge here. Learn more about Camosun's Territorial Acknowledgement.

The COVID-19 pandemic has presented many challenges, and Camosun College is committed to helping you safely complete your education. Following guidelines from the Provincial Health Officer, WorkSafe BC, and the B.C. Government to ensure the health and wellbeing of students and employees, Camosun College is providing you with every possible protection to keep you safe. Our measures include COVID Training for students and employees, health checks, infection control protocols including sanitization of spaces, PPE and ensuring physical distancing. For details on these precautions please follow this link: http://camosun.ca/covid19/faq/covid-faqs-students.html. However, if you're at all uncomfortable being on campus, please share your concerns with your Instructor. If needed, alternatives will be discussed.

Camosun College requires mandatory attendance for the first class meeting of each course. If you do not attend, and do not provide your instructor with a reasonable explanation in advance, you will be removed from the course and the space offered to the next waitlisted student.

INSTRUCTOR DETAILS

NAME: Francis Michaud EMAIL: michaudf@camosun.bc.ca

OFFICE: Online, on Collaborate

HOURS: 12:45 to 1:15 Monday to Thursday (Additional availability on demand)

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.

Students will learn statistical methods for applications in business. They will study how to describe and analyze data, analyze decisions made with uncertainty, interpret descriptive statistics for one and two variables, and make predictions based on statistical data.

PREREQUISITE(S):

One of:

- C in Pre-calculus 11
- C in Foundations of Math 11
- C in MATH 077
- C in MATH 137
- C+ in Math 072
- C+ in MATH 075
- C+ in MATH 135

COURSE LEARNING OUTCOMES / OBJECTIVES

Upon successful completion of this course, students will be able to:

- 1. Identify and utilize statistical information available in the databases, media, and business environments to guide decision making.
- 2. Analyze quantitative data to interpret their use in business applications.
- 3. Calculate and interpret descriptive statistics for one and two variable problems.
- 4. Apply the common rules of probability to discrete and continuous distributions.
- 5. Construct and interpret a confidence interval estimate.
- 6. Use the central limit theorem to determine possible sample sizes for various business problems.
- 7. Carry out an appropriate hypothesis test in a one and two sample hypothesis test.

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

Recommended Texts: Lind, D., Marchal, W., Wathen, S. and Ann Waite, C. (2016), *Elementary Statistics Quantitative Methods BUS 230/231*, McGraw-Hill.

Online coursework will be completed using D2L.

Other: Microsoft Excel.

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

WEEK	ТОРІС	EVALUATIONS
Week 1	Introduction to Statistics Describing Data 1	
Week 1.5	Describing Data 1 Describing Data 2	Quiz 1 (Sunday 11:59PM) Quiz 2 (Sunday 11:30PM) Discussion 2 (Sunday 11: 59PM) Discussion 1 (Sunday 11: 59PM)
Week 2	Describing Data 2	
Week 2.5	Introduction to Probability	Quiz 3 (Sunday 11: 59PM) Quiz 4 (Sunday 11: 59PM) Discussion 3 (Sunday 11: 59PM)
Week 3	No New Material	Discussion 4 (Monday 11: 59PM) Midterm 1 (Tuesday)
Week 3.5	Discrete Probability Distributions	Assignment (Sunday 11: 59PM) Quiz 5 (Sunday 11: 59PM)
Week 4	Continuous Probability Distributions	
Week 4.5	Sampling Method and the Central Limit Theorem	Quiz 6 (Sunday 11: 59PM) Discussion 5(Sunday 11: 59PM) Quiz 7 (Sunday 11: 59PM)
Week 5	Estimation and Confidence Intervals	
Week 5.5	No New Material	Quiz 8 (Thursday: 11:59PM) Discussion 6 (Thursday 11: 59PM) Midterm 2 (Friday)
Week 6	One Sample Hypothesis Testing	
Week 6.5	Two Sample Hypothesis Testing	Quiz 9 (Sunday 11: 59PM) Quiz 10 (Sunday 11: 59PM) Discussion 7 (Sunday 11: 59PM)
Week 7	Linear Regression and Correlation	
Week 7.5	No New Material	Quiz 11 (Sunday 11: 59PM) Assignment (Sunday 11: 59PM) Discussion 8 (Sunday 11: 59PM)

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 scan be reviewed on the <u>CAL exams page</u>. <u>http://camosun.ca/services/accessible-learning/exams.html</u>

DESCRIPTION	WEIGHTING
Weekly In-Person Meeting	5%
Discussions	10%
Quizzes	10%
Assignments	10%
Midterm 1	20%
Midterm 2	20%
Final Examination	25%
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.	100%

me as soon as possible. Refer to the <u>Grade Review and Appeals</u> policy for more information. <u>http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf</u>

Weekly In-Person Meeting: You will be required to meet with the instructor once a week. The meeting should only take about 5 minutes on most weeks and the instructor will endeavour to be as flexible as possible with regards to the time of these meeting (given the online nature of this course). During this meeting we will discuss your assignments, quizzes, and general progress in the class. You are encouraged to voice any concerns with regards to the course during these meetings.

Quizzes: You will get a quiz for each Chapter. These quizzes are easier than the examinations. Their purpose is to ease you into the material. You will get 4 attempts per quiz and the highest grade will be kept. The quizzes are due on Sunday at 11:59PM (Unless an exam will be due before Sunday at which point the quiz will be due the day before the exam). It is recommended that you complete your first attempt at each quiz during the week so that you can ask questions from your instructor if needed.

Assignments: You will get a term assignment during the semester. This assignment will be posted on the assignment tab in D2L.

Discussions: You will get discussions during the semester. These discussions must be posted on the discussion board in D2L. For most of the discussions, you do not actually have to answer to other students' posts. However, if you feel like it, you are encouraged to do it.

Midterms and Final: The midterms are not cumulative; the Final is cumulative.

Assignment formatting. The School of Business uses APA style for formatting assignments and citing references. Proper citations and formatting using APA style will be required. See Camosun College (2018) Library Citation Guides retrieved from: <u>http://camosun.ca.libguides.com/apa7</u>

- U Where required by your instructor, submit all assignments into the D2L assignments by your last name.
- □ In text citations for quotes, paraphrasing, and references must be consistent with APA standards.
- Grammar, spelling, style and APA formatting, citations and referencing will be assessed in your mark.
- □ All submitted work must be properly referenced to sources where required by your instructor.
- Unless otherwise specified, you are to submit your own work, any work collaborated (unless permitted by the course) will be considered in violation of the college's Student Conduct Policy. See Camosun College (2003) Student Conduct Policy from: <u>http://camosun.ca/about/policies/education-academic/e-2student-services-and-support/e-2.5.pdf.</u>

Deadlines and exams. You must submit your assignments on the due date or as announced. A grade of zero will be assigned to late submissions. There are no additional assignments or make-up exams of any kind if you performed poorly on an assignment, midterm or final exam.

- a) <u>EXAM DATES WILL NOT BE RESCHEDULED</u>. Non-attendance on scheduled exam dates results in a zero grade. Exceptions will be made only for medical reasons or extenuating circumstances that must be submitted and then accepted by the instructor. Please advise your instructor promptly.
- b) Students registered through the <u>Centre for Accessible Learning (CAL)</u> should discuss timelines with their instructors at the beginning of each semester.
- c) Medical notes must be dated, signed, and be written on letterhead or prescription paper imprinted with the physician's name and address. Notes are accepted from Physician (GP or medical specialist), Nurse Practitioner, Psychiatrist, Psychologist, Counsellor and Aboriginal Elder. Electronic notes will not be accepted. Medical documentation must be received as soon as reasonably possible.

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 <u>http://camosun.ca/students/</u>.

Support Service	Website
Academic Advising	http://camosun.ca/advising
Accessible Learning	http://camosun.ca/accessible-learning

Support Service	Website
Counselling	http://camosun.ca/counselling
Career Services	http://camosun.ca/coop
Financial Aid and Awards	http://camosun.ca/financialaid
Help Centres (Math/English/Science)	http://camosun.ca/help-centres
Indigenous Student Support	http://camosun.ca/indigenous
International Student Support	http://camosun.ca/international/
Learning Skills	http://camosun.ca/learningskills
Library	http://camosun.ca/services/library/
Office of Student Support	http://camosun.ca/oss
Ombudsperson	http://camosun.ca/ombuds
Registration	http://camosun.ca/registration
Technology Support	http://camosun.ca/its
Writing Centre	http://camosun.ca/writing-centre

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 Accommodations for Students with Disabilities

The College is committed to providing appropriate and reasonable academic accommodations to students with disabilities (i.e. physical, depression, learning, etc). If you have a disability, the <u>Centre for Accessible</u> <u>Learning</u> (CAL) can help you document your needs, and where disability-related barriers to access in your courses exist, create an accommodation plan. By making a plan through CAL, you can ensure you have the appropriate academic accommodations you need without disclosing your diagnosis or condition to course instructors. Please visit the CAL website for contacts and to learn how to get started: http://camosun.ca/services/accessible-learning/

Academic Integrity

Please visit <u>http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.13.pdf</u> for policy regarding academic expectations and details for addressing and resolving matters of academic misconduct.

Academic Progress

Please visit <u>http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-</u> <u>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>http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.2.pdf</u> for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit <u>http://camosun.ca/learn/fees/#deadlines</u>.

Grading Policy

Please visit <u>http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf</u> for further details about grading.

Grade Review and Appeals

Please visit <u>http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf</u> for policy relating to requests for review and appeal of grades.

Mandatory Attendance for First Class Meeting of Each Course

Camosun College requires mandatory attendance for the first class meeting of each course. If you do not attend, and do not provide your instructor with a reasonable reason in advance, you will be removed from the course and the space offered to the next waitlisted student. For more information, please see the "Attendance" section under "Registration Policies and Procedures"

(<u>http://camosun.ca/learn/calendar/current/procedures.html</u>) and the Grading Policy at http://camosun.ca/learn/calendar/current/procedures.html) and the Grading Policy at http://camosun.ca/learn/calendar/current/procedures.html) and the Grading Policy at http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf.

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. Please visit http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.8.pdf to learn more about the process involved in a medical/compassionate withdrawal.

Sexual Violence and Misconduct

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 or misconduct 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 and Misconduct Policy: http://camosun.ca/about/policies/education-academic/e-2-student-servicesand-support/e-2.9.pdf and camosun.ca/sexual-violence. To contact the Office of Student Support: oss@camosun.ca or by phone: 250-370-3046 or 250-3703841

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 http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf to understand the College's expectations of academic integrity and student behavioural conduct.

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.