COURSE SYLLABUS

COURSE TITLE: Business Statistics Car loca CLASS SECTION: D05 the We TERM: Winter 2023 gra knc COURSE CREDITS: 3 Lea DELIVERY METHOD(S): Online Asynchronous For COVID-19 information please visit <u>https://camosun.ca/about/covid-19-updates</u>



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 <u>Territorial Acknowledgement</u>.

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: Joel Tamosiunas

EMAIL: TamosiunasJ@camosun.ca

OFFICE: Virtual office hours via Zoom

HOURS: To be determined

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

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.

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.
- 8. Describe how linear regression models forecast business activity

Text (optional): You are <u>NOT REQUIRED</u> to purchase a textbook for this course.

If you *would like* a textbook to accompany the course materials, then I recommend one of the following:

Introductory Business Statistics by Holmes, Illowsky and Dean.
Available for free from <u>https://openstax.org/details/books/introductory-business-statistics</u>

OR

- Statistical Techniques in Business & Economics (any edition) by Lind Marchal and Wathen Also available in the Canadian edition and a custom print edition under these titles:
 o (Canadian ed.) Basic Statistics for Business & Economics by Lind et al., Waite and Murphy
 - o (Custom ed.) Elementary Statistics/Quantitative Methods Custom Print for Camosun BUS 230/231

Calculator (required): You will need a financial or scientific calculator. The Texas Instruments BAII+ financial calculator is recommended and will be used for demonstrations, but you may use another model.

Software (optional): There is NO required software; however, I will demonstrate the use of Microsoft Excel as a statistical tool. The use of this software is entirely optional, but should you wish to avoid the tedium of longer calculations, then please be aware that the entire Microsoft Office Suite of applications is available for free to Camosun students. For more information go to <u>https://legacy.camosun.ca/services/its/other-services.html</u>

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. Course content will be released at the beginning of the week in which that unit is covered, e.g., Topic 2.1 content will be released the morning of Monday, January 16.

| WEEK or DATE RANGE | | ΤΟΡΙϹ | UNIT | |
|--------------------|-----------------|---|---|--|
| 1 | Jan 9 to 13 | Topic 1 – Introduction | Unit 1: Introduction to Statistics | |
| 2 | Jan 16 to 20 | Topic 2.1 – Tables, Charts, & Graphs | Unit 2: Descriptive Statistics | |
| 3 | Jan 23 to 27 | Topic 2.2 – Essential Numerical Statistics | | |
| 4 | Jan 30 to Feb 3 | Topic 2.3 – Skewness & Correlation | | |
| 5 | Feb 6 to 10 | Catchup & Review / <mark>Exam 1</mark> <mark>Quizzes 1 to 4 due Feb 8</mark> | | |
| 6 | Feb 13 to 17 | Topic 3.1 – Random Variables & Probability | Unit 3: Random Variables, Probability, and Probability Distributions | |
| 7 | Feb 20 to 24 | Reading Break | | |
| 8 | Feb 27 to Mar 3 | Topic 3.2 – Discrete Probability Distributions | | |

| WEEK or DATE RANGE | | ΤΟΡΙϹ | UNIT | |
|--------------------|----------------|--|---------------------|--|
| 9 | Mar 6 to 10 | Topic 3.3 – Continuous Probability Distributions | | |
| 10 | Mar 13 to 17 | Catchup & Review Week / <mark>Exam 2</mark> Quizzes 5 to 7 due Mar 15 | | |
| 11 | Mar 20 to 24 | Topic 4.1 – Sampling & the CLT | | |
| 12 | Mar 27 to 31 | Topic 4.2 – Confidence Intervals | Unit 4: Inferential | |
| 13 | Apr 3 to Apr 7 | Topic 4.3 – Hypothesis Tests | Statistics | |
| 14 | Apr 10 to 14 | &Regression Analysis | | |
| Apr 17 to 25 | | Exam Period – <mark>Exam 3</mark> <mark>Quizzes 8 to 10 due April 17</mark> | | |

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>

EVALUATION OF LEARNING

| DESCRIPTION | | WEIGHTING |
|--|--|-----------|
| 3 Exams (20%, 25%, and 30%) | | 75% |
| 10 Quizzes (2.5% each) | | 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 <u>Grade Review and Appeals</u> policy for more information. http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf | | 100% |
| | | |

COURSE GUIDELINES & EXPECATIONS

Exams: You will write 3 exams during the semester. Exams are NOT cumulative. Their weights, coverages and dates are as follows:

| Exam | Weight | Coverage | Exam Window |
|------|--------|---------------|-------------|
| 1 | 20% | Units 1 and 2 | Feb 9 - 10 |
| 2 | 25% | Unit 3 | Mar 16 - 17 |
| 3 | 30% | Unit 4 | Apr 18 - 20 |

The exams are administered online and may be completed remotely. Each exam will be available to you for a 48-hour period (72-hour period for the final exam), on the dates posted above. You may start your exams

whenever you like within the stated periods; once started, however, the exams are limited to 120 minutes duration and must be completed prior to the closure of the exam window. Additional information regarding the examination format and materials allowed will be provided on the course website (D2L).

Quizzes: You will complete 10 online quizzes during the semester – one per section. Quizzes will be released with the content for that section and are due on the dates provided in the course schedule – no extensions will be provided. The assignments are to be distributed and submitted online. Additional details regarding the assignments will be provided on the course website (D2L).

SCHOOL OR DEPARTMENTAL INFORMATION

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) **EXAM DATES WILL NOT BE RESCHEDULED**. 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.

Please see Camosun College Academic Regulations & Standards for additional information regarding final exam policies: <u>https://calendar.camosun.ca/content.php?catoid=7&navoid=367#examinations</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 <u>http://camosun.ca/students/</u>.

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

and-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.