

# COURSE SYLLABUS



COURSE TITLE: Quantitative Methods  
CLASS SECTION: Bus 231 - 004  
TERM: 2023 Winter  
COURSE CREDITS: 3  
DELIVERY METHOD(S): Online Synchronous

Camosun College campuses are located on the traditional territories of the Ləkʷəŋən and WSÁNEĆ peoples. We acknowledge their welcome and graciousness to the students who seek knowledge here. Learn more about Camosun's [Territorial Acknowledgement](#).

For COVID-19 information please visit <https://legacy.camosun.ca/covid19/index.html>.

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*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

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NAME: Ocean Lu  
EMAIL: [Luo@camosun.ca](mailto:Luo@camosun.ca)  
OFFICE: Interurban – CBA 225B  
HOURS: Posted on D2L

*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

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Students will apply a number of statistical techniques used for business decision-making. They will learn to solve business problems and make related predictions using simple and multiple regressions, exponential smoothing, non-parametric statistical procedures, analysis of variance, seasonal and enumerative data, linear programming, and inventory control models.

PREREQUISITE(S): One of: C in STAT 116, C in STAT 216, C in STAT 218, C in BUS 230

## COURSE LEARNING OUTCOMES / OBJECTIVES

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

1. Utilize appropriate tools to support quantitative problem solving.
2. Apply the F-distribution and the concept of analysis of variance (ANOVA) to compare means of multiple populations and make inferences about the relative variances of two populations.
3. Develop simple and multiple linear regression models for analyzing cross-sectional data.
4. Apply the chi-squared distribution and non-parametric methods to hypothesis testing and the analysis of ranked data.
5. Use and explain concepts related to statistical quality control.
6. Construct and use indices to compare data.
7. Choose appropriate time series methods and use them to forecast in-sample and out-of-sample data.

## REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

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<b>Text:</b>	Lind, D., Marchal, W., Wathen, S., & Waite, C. (2018). <i>Elementary Statistics: Quantitative Methods BUS 230/231</i> (Custom Publication for Camosun College). Canada: McGraw-Hill Education.
<b>Microsoft Office:</b>	A free subscription of Office 365 is available to all current Camosun College students. Sign up for Office 365 at <a href="http://camosun.ca/services/its/other-services.html">http://camosun.ca/services/its/other-services.html</a> .
<b>Other:</b>	Texas Instruments BAII Plus financial calculator or a standard nonprogrammable calculator.

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

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

DATES	TOPIC
Jan. 9 – Jan. 13	Introduction/Review Confidence Intervals
Jan. 16 – Jan. 20	Hypothesis Testing
Jan. 23 – Jan. 27	Hypothesis Testing
Jan. 30 – Feb. 3	ANOVA (Analysis of Variance)
Feb. 6 – Feb. 10	ANOVA (Analysis of Variance)
Feb. 13 – Feb. 17	Chi-Square Applications and Index Numbers
Feb. 20 – Feb. 24	<b>Reading Break</b>
Feb. 28 – Mar. 4	<b>Review on Feb 28 Midterm on March 2</b>
Mar. 7 – Mar. 11	Analysis of Ordinal Data/Sample Midterm posted on D2L
Mar. 14 – Mar. 18	Linear Regression Analysis
Mar. 21 – Mar. 25	Multiple Regression Analysis
Mar. 28 – Apr. 1	Multiple Regression Analysis
Apr. 4 – Apr. 8	Time Series
Apr. 11 – Apr. 15	Sample Final Posted on D2L

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 [CAL exams page](http://camosun.ca/services/accessible-learning/exams.html). <http://camosun.ca/services/accessible-learning/exams.html>

## EVALUATION OF LEARNING

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DESCRIPTION	WEIGHTING
Assignments	30%
D2L Quizzes	10%
Project	10%
Midterm Exam	25%
Final Exam	25%
	<b>TOTAL</b>
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 <a href="http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf">Grade Review and Appeals</a> policy for more information. <a href="http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf">http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf</a>	
	100%

## COURSE GUIDELINES & EXPECTATIONS

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### Lecture Attendance

To get the most out of this course, students are expected to attend all classes and be on time. It is your responsibility to acquire all information given during a class missed.

### Assignments

Assignments will be made available on D2L – Assignment. You should submit before the deadline on the same drop box.

### D2L Quizzes

You will have a few quizzes will be assigned on D2L-Quiz. Your top 5 quizzes will be counted towards your final grade.

### Midterm Exam

Additional information regarding the midterm exam will be discussed in class and made available on D2L.

### Final Exam

Additional information regarding the final exam will be discussed in class and made available on D2L during the last week of instruction.

### Project

You will be preparing a 5-minute video tutorial, accompanying handout, and practice problem(s) to walk your peers through one of the hypothesis testing procedures from the course.

Teaching a concept to others is one of the best ways to further your own understanding of it. The materials produced during this project will be available as study resources for the final exam. The video will be worth 7.5% and the supporting materials account for the remaining 2.5%.

**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: <http://camosun.ca.libguides.com/apa7>.

- 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: <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf>.

**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 [Centre for Accessible Learning \(CAL\)](#) 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

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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

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

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

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.

### 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 [Centre for Accessible Learning](#) (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 <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.13.pdf> for policy regarding academic expectations and details for addressing and resolving matters of academic misconduct.

### Academic Progress

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.1.pdf> 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 <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.2.pdf> for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit <http://camosun.ca/learn/fees/#deadlines>.

### Grading Policy

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

### Grade Review and Appeals

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf> 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" (<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-services-and-support/e-2.9.pdf> and [camosun.ca/sexual-violence](http://camosun.ca/sexual-violence). To contact the Office of Student Support: [oss@camosun.ca](mailto: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.