# **COURSE SYLLABUS**



COURSE TITLE: BUS 145 – Business Data Analysis

CLASS SECTION: D05

TERM: Fall 2024

COURSE CREDITS: 3

DELIVERY METHOD(S): Asynchronous online with scheduled exams

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

#### **INSTRUCTOR DETAILS**

NAME: Julia Grav, MEd.

EMAIL: gravj@online.camosun.ca

OFFICE: CBA 231G Interurban Campus

**HOURS:** Upon request via Zoom

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 provides students with an opportunity to explore data management and data analysis and the role that they play in supporting business goals. Students will design and develop a relational database and use advanced spreadsheet skills to support data analysis and decision making.

PREREQUISITE(S): C in BUS 140 or equivalent

CO-REQUISITE(S): **None** EQUIVALENCIES: **None** 

#### COURSE LEARNING OUTCOMES / OBJECTIVES

Upon successful completion of this course a student will be able to:

- a. Describe how information systems support business operations.
- b. Build and use spreadsheet models to assist decision making.
- c. Use miscellaneous tools such as data tables, scenarios, and solver to perform sensitivity analyses and to examine other what-if scenarios.
- d. Use spreadsheet software to perform various data analysis tasks using tables, subtotals, pivot tables, pivot charts, conditional functions, and database functions.

- e. Construct and interpret a variety of system description documents, including requirements analysis and simple entity relationship diagrams
- f. Construct a small relational database application including tables, queries, forms, reports, and a basic user-interface such as a switchboard or tabbed form.
- g. Apply data integrity tools such as input masks and validation rules to spreadsheet and database data.
- h. Integrate data from various sources for the purpose of mail/e-mail merging or for further analysis using spreadsheet software

#### REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

## **REQUIRED**

- 1. A recent computer with MS Office installed (MS Access is optional)
- 2. Tableau (student account provided)

**Note:** Instructions will be provided on how to download software and access online accounts in the first week of the course

# 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. All times listed are in **Pacific Standard Time (PST)** 

DATES	MODULE	TOPIC	ASSIGNMENTS
Week 1: September 2-8, 2024	Module 1 – Excel Basics Review	Course Introduction BUS 140 Review of key concepts	Are you Ready for Bus 145? Quiz Bonus due Sunday, Sept. 8 before 11:30pm.
Week 2: September 9-15, 2024		Embedded, Conditional, Database Functions and Advanced Filters	Social Annotation: Database Functions Excel due Wednesday, Sept. 11 before 11:30pm Assignment: Logical, Conditional and Database functions Reflection due Monday, Sept. 16 before 11:30pm
Week 3: September 16-22, 2024		Data Mining (Sorting, Tables, Filters & Subtotals). Conditional Formatting	Assignment: Data Mining Reflection due Monday, Sept. 23 before 11:30pm
Week 4: Sept. 23 – 29, 2024	Module 2 - Spreadsheets	What-if Analysis (Goal Seek, Scenario Manager and Data Tables)	Social Annotation: Intro to What-if Analysis due Wednesday, September 25 before 11:30pm Assignment: Sensitivity Analysis Reflection due Monday, Sept. 30 before 11:30pm
Week 5: Sept. 30 - Oct. 6, 2024		Pivot Tables	Social Annotation: Excel Pivot Tables due Wednesday, Oct. 2 before 11:30pm Assignment: Subtotals & Pivot Tables Reflection due Monday Oct. 7 before 11:30pm PST

Week 6: Oct. 7-13, 2024		Decision Support Systems	Assignment: Decision Support System  Reflection due Tuesday, Oct. 15*  before 11:30pm
Week 7: Oct. 14-20, 2024	Module 3 – Business information systems	Business Process Flow diagrams	Social Annotation: What is Data Analysis due Wednesday, Oct. 17 before 11:30pm Open Book Online Excel Exam on Monday, October 21 from 6-8pm PST (20%)
Week 8: Oct. 21- 27, 2024	Module 4 - Databases	Relational Database Design and Normalization	Social Annotation Reading: Relational Database Design ERD & Table Maps due Monday, Oct. 28 before 11:30pm
Week 9: Oct. 29 - Nov.3, 2024		Relational Database Design and Validation	Assignment: ERDs & Data Dictionaries due Monday, Nov. 4 before 11:30pm
Week 10: Nov. 3 - 10, 2024		Relational Database Construction in Open Office Base	Project Team Charter  Due Tuesday, Nov. 12* before  11:30pm
Week 11: Nov. 11 – 17, 2024		Database Queries	Project Part 1: Database Design  Due Monday, Nov. 18 before  11:30pm
Week 12: Nov. 18 – 24, 2024		Database Reports	Social Annotation: 10 Best Practices for Building Effective Dashboards due Wednesday Nov. 20 before 11:30pm Assignment: Sales Data Analysis Reflection due Monday, November 25 before 11:30pm
Week 13: Nov. 25 - Dec. 1, 2024		Database Interface (UI) & Forms	Social Annotation: Tableau Stories Best Practices Due Wednesday, Nov. 27 before 11:30pm Project Part 2: Build, Queries & Report Due Monday, December 2 before 11:30pm
Week 14: Dec. 2 – 6, 2024	Module 5 - Integration	Integrating Data Types	<ol> <li>Assignment: File Management</li> <li>Project Part 3: Dashboards &amp; Story</li> <li>Both due Friday, December 6 before</li> <li>11:30pm</li> </ol>

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>. <a href="https://camosun.ca/services/academic-supports/accessible-learning/academic-accommodations-exams">https://camosun.ca/services/academic-supports/accessible-learning/academic-accommodations-exams</a>

## **EVALUATION OF LEARNING**

DESCRIPTION	WEIGHTING

Hypothe.is Social Annotation		15%
(7 readings with the lowest grade dropped)	13/0	
Assignments		30%
(7 assigned with the lowest grade dropped)	30%	
Database Project		35%
Team Designed Alliance	4%	
Part 1: Design & Business Process Flow	10%	
Part 2: Build, Query & Report	12%	
Part 3: Dashboards & Story	9%	
Midterm Excel Exam		200/
Open book and applied.		20%

**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 <u>Grade Review and Appeals</u> policy for more information. <a href="https://camosun.ca/sites/default/files/2021-05/e-1.14.pdf">https://camosun.ca/sites/default/files/2021-05/e-1.14.pdf</a>

#### **COURSE GUIDELINES & EXPECTATIONS**

In-house citation rules will be used on all written assignments. Specifically, all sources must have an in-text (parenthetical) citation with at direct link to source. e.g. (Grav, 2024)

#### SCHOOL OR DEPARTMENTAL INFORMATION

## **Assignments**

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 Library Citation Guides retrieved from: <a href="https://camosun.libguides.com/apa7">https://camosun.libguides.com/apa7</a>

- Submit all assignments into the D2L assignments by your last and first name.
- In-text citations for quotes, paraphrasing, and references must be consistent with APA standards. In house-rules that in-text citations require a direct link to the source. (Grav, 2024)
- Grammar, spelling, style and APA formatting, citations and referencing will be assessed in your mark.
- All submitted work must be properly referenced to sources.

Unless otherwise specified, you are to submit your own work. Any work collaborated on (unless permitted by the course) will be considered in violation of the college's Academic Integrity policy. See Camosun College (2021) <u>Academic Integrity Policy</u>

#### **Deadlines and exams**

You must submit your assignments by 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.

EXAM DATES WILL NOT BE RESCHEDULED. Non-attendance on scheduled exam dates will result in a zero grade. All exams must be written at the scheduled times with the exception of students requiring an

accommodation by CAL. It is understood that emergency circumstances do occur (e.g. severe illness or family emergency); for such circumstances accommodation may be granted at the discretion of the instructor, provided the student:

- a) notifies the instructor in advance of the exam (not after), and
- b) provides documented evidence of the circumstance (e.g. medical certificate).

In most cases of an excused absence for an exam, an alternate exam will be scheduled for the student at the end of term.

Do not make travel plans until the final exam schedules are finalized and posted. Please ask any family members who might make travel plans on your behalf to consult you before booking tickets. Travel plans are not an acceptable reason to miss an exam.

Students registered through the <u>Centre for Accessible Learning (CAL)</u> should discuss timelines with their instructors at the beginning of each semester.

#### 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>camosun.ca/services</u>.

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	camosun.ca/programs-courses/iecc/indigenous-student- services
International Student Support	camosun.ca/international
Learning Skills	camosun.ca/services/academic-supports/help- centres/writing-centre-learning-skills
Library	camosun.ca/services/library

Support Service	Website
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: <a href="https://camosun.libguides.com/academicintegrity/welcome">https://camosun.libguides.com/academicintegrity/welcome</a>
Please visit <a href="https://camosun.ca/sites/default/files/2021-05/e-1.13.pdf">https://camosun.ca/sites/default/files/2021-05/e-1.13.pdf</a> 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 <a href="https://camosun.ca/sites/default/files/2023-02/e-1.1.pdf">https://camosun.ca/sites/default/files/2023-02/e-1.1.pdf</a> 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 <a href="https://camosun.ca/sites/default/files/2021-05/e-2.2.pdf">https://camosun.ca/sites/default/files/2021-05/e-2.2.pdf</a> for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit <a href="https://camosun.ca/registration-records/tuition-fees#deadlines">https://camosun.ca/registration-records/tuition-fees#deadlines</a>.

## **Grading Policy**

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

## **Grade Review and Appeals**

Please visit <a href="https://camosun.ca/sites/default/files/2021-05/e-1.14.pdf">https://camosun.ca/sites/default/files/2021-05/e-1.14.pdf</a> 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 <a href="Medical/Compassionate Withdrawals policy">Medical/Compassionate Withdrawals policy</a>). Please visit <a href="https://camosun.ca/services/forms#medical">https://camosun.ca/services/forms#medical</a> 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="mailto:camosun.ca/services/sexual-violence-support-and-education">https://camosun.ca/sites/default/files/2021-05/e-2.9.pdf</a> and <a href="mailto:camosun.ca/services/sexual-violence-support-and-education">camosun.ca/services/sexual-violence-support-and-education</a>.

To contact the Office of Student Support: <a href="mailto:oss@camosun.ca">oss@camosun.ca</a> 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: <a href="https://camosun.ca/about/camosun-college-policies-and-directives">https://camosun.ca/about/camosun-college-policies-and-directives</a>

**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.