COURSE SYLLABUS



COURSE TITLE: BUS 145 – Business Data Analysis

CLASS SECTION: D05

TERM: 2023 Fall

COURSE CREDITS: 3

DELIVERY METHOD(S): Asynchronous online with scheduled exams

Camosun College campuses are located on the traditional territories of the Ləkʿwəŋən and WSÁNEĆ peoples. We acknowledge their welcome and graciousness to the students who seek knowledge here.

Learn more about Camosun's Territorial Acknowledgement.

INSTRUCTOR DETAILS

NAME: Julia Grav

PREFERRED EMAIL: gravj@online.camosun.ca

OFFICE: CBA 231G Interurban Campus

HOURS: virtual TBD and on-campus Thursdays from 10:30-11:20am in CBA 231G

As your course instructor, I endeavour to provide an inclusive learning environment. If at any time 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 EXCLUSION(S): 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

- a. REQUIRED: A recent computer with Windows 10 operating system and MS Office installed (including MS Access). An on-campus computer can be used at either Interurban or Lansdowne.
- b. No published course materials are required for purchase.

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 dates are in **Pacific Standard Time (PST)**

| WEEK | MODULE | TOPIC | ASSIGNMENTS |
|--|--------------------------------------|--|---|
| Week 1: September 6-10, 2023 | Module 1 – Excel Basics Review | Course Introduction BUS 140 Review of key concepts | Are you Ready for Bus 145? Quiz Discussion: Introductions & PhotoVoice Both due Monday, Sept 11 at 11:30pm |
| Week 2: September 11-17, 2023 | | Embedded Functions (IF, AND, OR) Conditional Functions Database Functions and Advanced Filters | Assignment: Logical and conditional functions Reflection due Monday, Sept. 18 at 11:30pm |
| Week 3: September 18-24, 2023 | | What if Analysis (Goal Seek, Scenario Manager and Data Tables) | Discussion: Data tables Quiz: What-if Analysis Both due Tuesday, Sept. 26* at 11:30pm |
| Week 4: Sept. 25 - Oct.1, 2023 | Module 2 - Spreadsheets | Data Mining (Sorting, Tables & Subtotals) | Assignment: Sensitivity Analysis Reflection due Tuesday, Oct. 2 at 11:30pm |
| Week 5: Oct. 2-8, 2023 | • | Pivot Tables | Assignment: Subtotals & Pivot Tables Assignment: Spreadsheeting concept map Both due Tuesday Oct. 10** at 11:30pm PST |
| Week 6: Oct. 9-15 2023 | | Decision Support Systems | Assignment: Decision Support System Reflection Monday, Oct. 16 at 11:30pm |

| Week 7: Oct. 16-22, 2023 | Module 3 – Business information systems | Business Process Flow diagrams | Open Book Online Excel Exam on Monday, October 23 from 6-8pm PST (20%) |
|--|--|--|---|
| Week 8: Oct. 23- 29, 2023 | Module 4 - Databases | Relational Database Design and Normalization | Quiz: While reading about Normalization Discussion: Relational Database Design ERD & Table Maps Both due Monday, Oct. 30 at 11:30pm |
| Week 9: Oct. 30 - Nov.5, 2023 | | Relational Database Design and Validation | Assignment: Database Dictionaries Reflection due Nov. 6 before 11:30pm |
| Week 10: Nov. 6 - 12, 2023 | | Relational Database Construction in MS Access | Assignment: Database Construction Project Part 1: Database Design Both due Tuesday, November 14*** at 11:30pm |
| Week 11: Nov. 13 – 19, 2023 | | Database Queries | Assignment: Sales Data Analysis Queries Reflection due Monday, November 20 at 11:30pm |
| Week 12: Nov. 20 – 26, 2023 | | Database Reports | Project Part 2: Database Build & Test Due Monday, November 27 at 11:30pm |
| Week 13: Nov. 27 - Dec. 3, 2023 | | Database Interface (UI) & Forms | Project Part 3: Queries & Reports Assignment: Advanced Reports & Forms Due Monday, December 4 at 5:30pm |
| Week 14: Dec. 4 – 8, 2023 | Module 5 - Integration | Integrating Data Types | Open Book Online Access Exam on Monday, December 4 from 6-8pm PST (15%) 1. Assignment: File Management 2. Project: Form & UI (User Interface) 3. Discussion: The Future of Data Acquisition & Analysis All due Friday, December 8 at 11:30pm |

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>.

http://camosun.ca/services/accessible-learning/exams.html

^{*}In lieu of Yom Kapoor

^{**}In lieu of Thanksgiving

^{***} In lieu of Remembrance Day

EVALUATION OF LEARNING

| What-if Analysis 1.6 | 57% 57% | 5% |
|--|------------|-----|
| What-if Analysis While-Reading Normalization Quiz 1.6 D2L Discussions Introductions - PhotoVoice 2.5 Data tables Relational Database Design The Future of Data Acquisition & Analysis Assignments 10 assigned with the two lowest dropped) Database Project Team Designed Alliance Part 1: Design & Business Process Flow 7.5 Part 2: Build & Test Part 3: Query & Report Design 5% Part 4: Forms & UI 5% | 57% | |
| While-Reading Normalization Quiz D2L Discussions Introductions - PhotoVoice 2.5 Data tables 2.5 Relational Database Design 2.5 The Future of Data Acquisition & Analysis Assignments (10 assigned with the two lowest dropped) Database Project Team Designed Alliance 2.5 Part 1: Design & Business Process Flow 7.5 Part 2: Build & Test 5% Part 3: Query & Report Design 5% Part 4: Forms & UI 5% | | + |
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| Introductions - PhotoVoice 2.5 Data tables 2.5 Relational Database Design 2.5 The Future of Data Acquisition & 2.5 Analysis Assignments 10 assigned with the two lowest dropped) Database Project Team Designed Alliance 2.5 Part 1: Design & Business Process Flow 7.5 Part 2: Build & Test 5% Part 3: Query & Report Design 5% Part 4: Forms & UI 5% | 57% | |
| Data tables Relational Database Design The Future of Data Acquisition & 2.5 Analysis Assignments 10 assigned with the two lowest dropped) Database Project Team Designed Alliance 2.5 Part 1: Design & Business Process Flow Part 2: Build & Test Part 3: Query & Report Design 5% Part 4: Forms & UI 5% | | 10% |
| Relational Database Design The Future of Data Acquisition & 2.5 Analysis Assignments (10 assigned with the two lowest dropped) Database Project Team Designed Alliance 2.5 Part 1: Design & Business Process Flow 7.5 Part 2: Build & Test Part 3: Query & Report Design 5% Part 4: Forms & UI 5% | 5% | |
| The Future of Data Acquisition & Analysis Assignments 10 assigned with the two lowest dropped) Database Project Team Designed Alliance 2.5 Part 1: Design & Business Process Flow Part 2: Build & Test Part 3: Query & Report Design 5% Part 4: Forms & UI 5% | 5% | |
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| Part 1: Design & Business Process Flow 7.5 Part 2: Build & Test 5% Part 3: Query & Report Design 5% Part 4: Forms & UI 5% | | 25% |
| Part 2: Build & Test 5% Part 3: Query & Report Design 5% Part 4: Forms & UI 5% | 5% | |
| Part 3: Query & Report Design 5% Part 4: Forms & UI 5% | 5% | |
| Part 4: Forms & UI 5% | 6 | |
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| Open book and applied. See dates in the schedule above. | | 35% |
| Excel Exam 20 | % | |
| Access Exam 159 | % | |

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. https://camosun.ca/sites/default/files/2021-05/e-1.14.pdf

COURSE GUIDELINES & EXPECATIONS

In-house citation rules will be used on all written assignments. Specifically, all sources must have an in-text citation with at direct link to source. e.g. (Grav, 2023)

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 (2018) Library Citation Guides retrieved from: https://camosun.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. In house rules will be used that require a direct link to the source, linked the author's name in the in-text citation. E.g. (Grav, 2023)
- 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>

Congrats on reading the course syllabus thus far. Email your instructor before week 2 to receive a bonus 1%, mention you found this note (

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 http://camosun.ca/students/.

| 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 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. 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.