COURSE OUTLINE: BCA203 - DATA ANA/ACC INFO SY

Prepared: School of Business
Approved: Martha Irwin, Dean, Business and Information Technology

Course Code: Title	BCA203: DATA ANALYTICS & ACCOUNTING INFO SYSTEMS
Program Number: Name	2050: BUSINESS -ACCOUNTING
Department:	BUSINESS/ACCOUNTING PROGRAMS
Academic Year:	2024-2025
Course Description:	This course introduces data-driven business decision-making skills that enhance workplace practices. It will improve students` comprehension of data analytics, covering data acquisition, processing, and visualization to derive valuable business insights and improve decision-making. Students will also explore fundamental concepts and the application of computer-based information systems in management and accounting. Additionally, they will gain insights into the importance of internal controls and process documentation for generating, sharing, and safeguarding information.
Total Credits:	3
Hours/Week:	3
Total Hours:	42
Prerequisites:	There are no pre-requisites for this course.
Corequisites:	There are no co-requisites for this course.
Vocational Learning Outcomes (VLO's) addressed in this course: **Please refer to program web page for a complete listing of program outcomes where applicable.**	**2050 - BUSINESS -ACCOUNTING** VLO 5 Analyze organizational structures, the interdependence of functional areas, and the impact those relationships can have on financial performance. VLO 6 Analyze, within a Canadian context, the impact of economic variables, legislation, ethics, technological advances and the environment on an organization's operations. VLO 7 Outline the elements of an organization's internal control system and risk management. VLO 8 Contribute to recurring decision-making by applying fundamental financial management concepts.
Essential Employability Skills (EES) addressed in this course:	EES 1 Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience. EES 2 Respond to written, spoken, or visual messages in a manner that ensures effective communication. EES 4 Apply a systematic approach to solve problems. EES 5 Use a variety of thinking skills to anticipate and solve problems. EES 6 Locate, select, organize, and document information using appropriate technology and information systems. EES 7 Analyze, evaluate, and apply relevant information from a variety of sources.

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Course Evaluation:	Passing Grade: 50%, D A minimum program GPA of 2.0 or higher where program specific standards exist is required for graduation.
Other Course Evaluation & Assessment Requirements:	A+ = 90-100% A = 80-89% B = 70-79% C = 60-69% D = 50-59% F < 50%
Books and Required Resources:	Accounting Information Systems: Connecting Careers Systems and Analytics by Savage Brannock Publisher: WileyPLUS NextGen API Single Semester Edition: 1st ISBN: 9781119827870

Course Outcomes and Learning Objectives:

Course Outcome 1	Learning Objectives for Course Outcome 1
Discuss the role and significance of accounting information systems and highlight emerging trends in this field.	1.1 Explain why accounting information is important. 1.2 Explain how accounting information systems have evolved. 1.3 Describe how management uses accounting information systems for strategic decision-making. 1.4 Describe the relationship between accounting and data analytics. 1.5 Identify emerging trends in accounting information technology.
Course Outcome 2	**Learning Objectives for Course Outcome 2**
Explore the nature of risk and how businesses respond to risks.	2.1 Describe types of business risk. 2.2 Explain how businesses prioritize and classify risk. 2.3 Describe how organizations respond to risk.
Course Outcome 3	**Learning Objectives for Course Outcome 3**
Describe the importance of risk management and internal controls for accounting information systems.	3.1 Define internal controls and describe an internal control system. 3.2 Explain how internal controls mitigate risk. 3.3 Describe how internal controls are assessed for effectiveness.
Course Outcome 4	**Learning Objectives for Course Outcome 4**
Explain the value in identifying and documenting business processes.	4.1 Explain the goals of documenting systems and processes. 4.2 Differentiate among various documentation techniques. 4.3 Describe how program, process and document flowcharts help to document accounting information systems. 4.4 Summarize how a data flow diagram shows the flow of data in a system.
Course Outcome 5	**Learning Objectives for Course Outcome 5**
Explore the Human Resources and payroll	5.1 Explain the relationship between human resources and payroll.

	processed in business.	5.2 Evaluate the employee onboarding process and termination process, taking into account risk and control activities. 5.3 Connect the data in the underlying system and database to important reports and analytics.
	Course Outcome 6	**Learning Objectives for Course Outcome 6**
	Explore how computer crime, fraud, ethics and privacy concerns can impact an accounting information system.	6.1 Describe the role of an accounting professional in fraud management. 6.2 Describe common computer crimes and the proper controls for preventing them. 6.3 Explain the importance of ethical behaviour within accounting information systems.
	Course Outcome 7	**Learning Objectives for Course Outcome 7**
	Explain the growing field of data analytics, and its connection to accounting information systems. Learn how to manage large amounts of data, extract meaning, make decisions and forecast, detect anomalies, and present your findings.	7.1 Explain how value can be derived from data analysis. 7.2 Describe how data can be used to reduce uncertainty and risk. 7.3 Contrast developed and emergent analytics. 7.4 Discuss the opportunities and challenges of using big data in the Accounting disciplines. 7.5 Discuss how to mitigate the negative consequences that can arise when using data analytic models to predict human behaviour.
	Course Outcome 8	**Learning Objectives for Course Outcome 8**
	Gain an understanding of Microsoft Power Bi and its uses in business today, and be able to create simple, meaningful visualizations (dashboards).	8.1 Understand the report, data and model icons and their uses within Power Bi. 8.2 Be able to create basic data visualizations, such as charts, graphs and tables using Power Bi. 8.3 Understand how to import data from different sources into Power Bi. 8.4 Be able to build a simple interactive dashboard by combining multiple visualizations. 8.5 Be able to share reports and dashboards with others from Power Bi.
	Course Outcome 9	**Learning Objectives for Course Outcome 9**
	Gain an understanding of data visualization and its importance in business today. Understand the relationship between storytelling and data visualizations, how to apply design fundamentals and be able to use data visualizations to present insights to decision makers.	9.1 Summarize the importance of user-centric design and storytelling in data visualization. 9.2 Apply fundamental design principals to data visualizations. 9.3 Evaluate visualization techniques for exploratory analysis. 9.4 Describe visualization techniques that are used to create explanatory stories.

Evaluation Process and

Evaluation Type	Evaluation Weight

Grading System:		
	Assignments/Cases/Simulations/Projects	60%
	Test 1	20%
	Test 2	20%

Date:	May 17, 2024
Addendum:	Please refer to the course outline addendum on the Learning Management System for further information.