



COURSE OUTLINE: CSA103 - BUSINESS APPLIC I

Prepared: D. Kachur

Approved: Corey Meunier, Chair, Technology and Skilled Trades

Course Code: Title	CSA103: BUSINESS APPLICATIONS I
Program Number: Name	2090: COMPUTER PROGRAMMER 2095: COMPUTER PROGRAMMING
Department:	COMPUTER STUDIES
Semesters/Terms:	22W
Course Description:	In this course students will learn the basic to intermediate features of Microsoft Excel and Access. Students will learn to develop spreadsheet applications involving formulas and statistical charting as well as learn database concepts in order to develop small functional database systems. Students will be introduced to database design, table structures, forms, queries and reports. In addition, students will be introduced to the basic SQL structure and data mining to generate queries from standard database applications.
Total Credits:	4
Hours/Week:	4
Total Hours:	60
Prerequisites:	There are no pre-requisites for this course.
Corequisites:	There are no co-requisites for this course.
Substitutes:	CSA102
Vocational Learning Outcomes (VLO's) addressed in this course:	<p>2090 - COMPUTER PROGRAMMER</p> <p>VLO 4 Implement robust computing system solutions through validation testing that aligns with industry best practices.</p> <p>VLO 5 Communicate and collaborate with team members and stakeholders to ensure effective working relationships.</p> <p>VLO 8 Adhere to ethical, legal, and regulatory requirements and/or principles in the development and management of computing solutions and systems.</p> <p>VLO 9 Support the analysis and definition of software system specifications based on functional and non-functional requirements.</p> <p>VLO 11 Apply one or more programming paradigms such as, object-oriented, structured or functional programming, and design principles, as well as documented requirements, to the software development process.</p> <p>2095 - COMPUTER PROGRAMMING</p> <p>VLO 4 Implement robust computing system solutions through validation testing that aligns with industry best practices.</p> <p>VLO 5 Communicate and collaborate with team members and stakeholders to ensure effective working relationships.</p>
Please refer to program web page for a complete listing of program outcomes where applicable.	

In response to public health requirements pertaining to the COVID19 pandemic, course delivery and assessment traditionally delivered in-class, may occur remotely either in whole or in part in the 2021-2022 academic year.



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	<p>VLO 8 Adhere to ethical, legal, and regulatory requirements and/or principles in the development and management of computing solutions and systems.</p> <p>VLO 9 Support the analysis and definition of software system specifications based on functional and non-functional requirements.</p> <p>VLO 11 Apply one or more programming paradigms such as, object-oriented, structured or functional programming, and design principles, as well as documented requirements, to the software development process.</p>
<p>Essential Employability Skills (EES) addressed in this course:</p>	<p>EES 2 Respond to written, spoken, or visual messages in a manner that ensures effective communication.</p> <p>EES 3 Execute mathematical operations accurately.</p> <p>EES 4 Apply a systematic approach to solve problems.</p> <p>EES 5 Use a variety of thinking skills to anticipate and solve problems.</p> <p>EES 6 Locate, select, organize, and document information using appropriate technology and information systems.</p> <p>EES 7 Analyze, evaluate, and apply relevant information from a variety of sources.</p>
<p>Course Evaluation:</p>	<p>Passing Grade: 50%, D</p> <p>A minimum program GPA of 2.0 or higher where program specific standards exist is required for graduation.</p>
<p>Other Course Evaluation & Assessment Requirements:</p>	<p>A+ = 90-100% A = 80-89% B = 70-79% C = 60-69% D = 50-59% F < 50%</p> <p>Students are expected to be present to write all tests in class. If a student is unable to write a test due to illness or a legitimate emergency, that student must contact the professor prior to class and provide reasoning, which is acceptable to the professor. Should the student fail to contact the professor, the student shall receive a grade of zero on the test.</p> <p>Once the test has commenced, the student is considered absent and will not be given the privilege of writing the test.</p> <p>Students caught cheating during a test will receive an automatic zero. Please refer to the College Academic Dishonesty Policy for further information.</p> <p>In order to qualify to write a missed test, the student shall have:</p> <ol style="list-style-type: none"> attended at least 80% of the classes. provided the professor an acceptable explanation for his/her absence. been granted permission by the professor. <p>NOTE: The missed test that has met the above criteria will be an end-of-semester test.</p> <p>Academic success is directly linked to attendance. Missing more than 1/3 of the course hours in a semester shall result in an 'F' grade for the course.</p> <p>Labs and Assignments are due on the due-date indicated by the Professor. Notice by the</p>

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professor will be written on the lab or verbally announced in the class and / or both. No late labs will be accepted beyond the due date. Once labs / assignments have been marked by the professor and returned to the student, no new labs will be accepted. It is the responsibility of the student who has missed a class to contact the professor immediately to obtain the lab / assignment. Students are responsible for doing their own work. Labs / assignments that are handed in and are deemed identical in content and personal wording to others may constitute academic dishonesty and result in a zero grade.

The total overall average of test scores combined must be 50% or higher in order to qualify to pass this course. In addition, combined tests, Labs / Assignments total grade must be 50% or higher.

Books and Required Resources:

Beginning Excel 2019 by Noreen Brown, Barbara Lave, Hallie Puncochar, Julie Romey, Mary Schatz, Art Schneider, and Diane Shingledecker
 Publisher: Creative Commons Attribution
<https://openoregon.pressbooks.pub/beginningexcel19/>

Relational Databases and Microsoft Access by Ron McFadyen
 Publisher: Ron McFadyen Publishing
<https://open.umn.edu/opentextbooks/textbooks/442>

Course Outcomes and Learning Objectives:

Course Outcome 1	Learning Objectives for Course Outcome 1
1. Demonstrate an understanding of spreadsheet concepts, terminology and screen layouts.	1.1 Learn the basic structure of a spreadsheet - rows, columns, cells 1.2 Learn why spreadsheet applications are used 1.3 Learn to use screen menus, shortcuts, options and toolbars 1.4 Open and save workbooks and templates 1.5 Enter labels and values 1.6 Name, rename and move worksheets 1.7 Preview and print a worksheet
Course Outcome 2	Learning Objectives for Course Outcome 2
2. Demonstrate an understanding of how to use formulas and perform calculations.	2.1 Plan and design a worksheet 2.2 Edit cell entries 2.3 Enter numbers and formulas 2.4 Use formula functions 2.5 Copy and move cell contents 2.6 Apply absolute and relative addressing 2.7 Copy formulas with both relative and absolute cell references
Course Outcome 3	Learning Objectives for Course Outcome 3
3. Demonstrate an understanding of how to format a worksheet.	3.1 Format values 3.2 Use fonts and font sizes 3.3 Change attributes and alignment 3.4 Adjust column widths 3.5 Use AUTOFORMAT 3.6 Insert and delete columns and rows 3.7 Apply colours, patterns, and borders 3.8 Use conditional formatting 3.9 Check Spelling

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Course Outcome 4	Learning Objectives for Course Outcome 4
4. Demonstrate an understanding of how to create and edit charts.	4.1 Plan and design a chart 4.2 Create a Pie, Column and Bar chart 4.3 Edit and make changes to charts 4.4 Annotate and draw on a chart 4.5 Preview and print a chart
Course Outcome 5	Learning Objectives for Course Outcome 5
5. Demonstrate an understanding of advanced features of formulas and functions.	5.1 Create a formula with several operators 5.2 Use names in a formula 5.3 Generate multiple totals with AutoSum 5.4 Use dates in calculations 5.5 Build a conditional formula with the IF function 5.6 Use statistical functions 5.7 Calculate and print formula contents 5.8 Freeze columns and rows 5.9 Insert and delete worksheets 5.10 Consolidate worksheets 5.11 Hide and protect worksheet areas 5.12 Control page breaks and page numbering 5.13 Create a hyperlink between Excel files 5.14 Save an Excel file as a Web page
Course Outcome 6	Learning Objectives for Course Outcome 6
6. Demonstrate an understanding of automating worksheet tasks.	6.1 Plan, record, run and edit a macro 6.2 Use shortcut keys with macros 6.3 Use the Personal Macro Workbook 6.4 As a macro as a menu item 6.5 Create a toolbar for macros
Course Outcome 7	Learning Objectives for Course Outcome 7
7. Demonstrate an understanding of database concepts, terminology and screen layouts.	7.1 Understand Relational database structure and setup 7.2 Add, delete and change records in a table 7.3 Open a database and work with the database window 7.4 Preview and print a datasheet
Course Outcome 8	Learning Objectives for Course Outcome 8
8. Demonstrate the use of tables and queries.	8.1 Organize fields 8.2 Plan, create and modify tables 8.3 Format a datasheet 8.4 Sort records and find data 8.5 Filter records 8.6 Create and modify queries 8.7 Create relationships between tables 8.8 Enforce referential integrity
Course Outcome 9	Learning Objectives for Course Outcome 9
9. Demonstrate the use of forms and reports	9.1 Plan and create a form 9.2 Move and resize controls 9.3 Modify labels 9.4 Use text boxes for calculations 9.5 Modify tab order

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	<ul style="list-style-type: none"> 9.6 Enter, edit and print records 9.7 Insert an image 9.8 Plan and create a report 9.9 Use group sections 9.10 Change sort order 9.11 Add calculations 9.12 Align and format controls 9.13 Change page layout
Course Outcome 10	Learning Objectives for Course Outcome 10
10. Demonstrate the ability to modify database structure.	<ul style="list-style-type: none"> 10.1 Understand relational database components 10.2 Create related tables using one-to-many relationships 10.3 Create lookup fields 10.4 Modify text, number, currency and date fields 10.5 Modify field validation properties
Course Outcome 11	Learning Objectives for Course Outcome 11
11. Demonstrate the ability to create multiple table queries	<ul style="list-style-type: none"> 11.1 Build select queries 11.2 Sort a query on multiple fields 11.3 Develop AND and OR criteria 11.4 Create calculated fields 11.5 Build summary and crosstab queries
Course Outcome 12	Learning Objectives for Course Outcome 12
12. Demonstrate an understanding of basic SQL commands.	<ul style="list-style-type: none"> 12.1 Define and use SQL with Access 12.2 Create SQL standard queries using single and multiple tables 12.3 Update, delete and change records 12.4 Perform calculations using SQL 12.5 Use SQL to sort records

Evaluation Process and Grading System:

Evaluation Type	Evaluation Weight
Assignments	40%
Tests and Quizzes	60%

Date: August 6, 2021

Addendum: Please refer to the course outline addendum on the Learning Management System for further information.

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