



## COURSE OUTLINE: CSA103 - BUSINESS APPLIC I

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Approved: Corey Meunier, Chair, Technology and Skilled Trades

<b>Course Code: Title</b>	CSA103: BUSINESS APPLICATIONS I
<b>Program Number: Name</b>	2090: COMPUTER PROGRAMMER 2091: COMPUTER - PROG/ANAL
<b>Department:</b>	COMPUTER STUDIES
<b>Semesters/Terms:</b>	19W
<b>Course Description:</b>	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.
<b>Total Credits:</b>	4
<b>Hours/Week:</b>	4
<b>Total Hours:</b>	0
<b>Prerequisites:</b>	There are no pre-requisites for this course.
<b>Corequisites:</b>	There are no co-requisites for this course.
<b>Substitutes:</b>	CSA102
<b>Vocational Learning Outcomes (VLO's) addressed in this course:</b>	<b>2090 - COMPUTER PROGRAMMER</b>
<b>Please refer to program web page for a complete listing of program outcomes where applicable.</b>	VLO 2 Develop, test, document, deploy, and maintain secure program code based on specifications.
	VLO 3 Perform routine maintenance on a database.
<b>Essential Employability Skills (EES) addressed in this course:</b>	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 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.
<b>Course Evaluation:</b>	Passing Grade: 50%, D
<b>Other Course Evaluation &amp; Assessment Requirements:</b>	A+ = 90-100% A = 80-89% B = 70-79% C = 60-69% D = 50-59% F < 50%



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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.

Once the test has commenced, the student is considered absent and will not be given the privilege of writing the test.

Students caught cheating during a test will receive an automatic zero. Please refer to the College Academic Dishonesty Policy for further information.

In order to qualify to write a missed test, the student shall have:

- a) attended at least 80% of the classes.
- b) provided the professor an acceptable explanation for his/her absence.
- c) been granted permission by the professor.

NOTE: The missed test that has met the above criteria will be an end-of-semester test.

Labs and Assignments are due on the due-date indicated by the Professor. Notice by the 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.

**Course Outcomes and Learning Objectives:**

<b>Course Outcome 1</b>	<b>Learning Objectives for Course Outcome 1</b>
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
<b>Course Outcome 2</b>	<b>Learning Objectives for Course Outcome 2</b>
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
<b>Course Outcome 3</b>	<b>Learning Objectives for Course Outcome 3</b>
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



	<p>3.4 Adjust column widths</p> <p>3.5 Use AUTOFORMAT</p> <p>3.6 Insert and delete columns and rows</p> <p>3.7 Apply colours, patterns, and borders</p> <p>3.8 Use conditional formatting</p> <p>3.9 Check Spelling</p>
<b>Course Outcome 4</b>	<b>Learning Objectives for Course Outcome 4</b>
4. Demonstrate an understanding of how to create and edit charts.	<p>4.1 Plan and design a chart</p> <p>4.2 Create a Pie, Column and Bar chart</p> <p>4.3 Edit and make changes to charts</p> <p>4.4 Annotate and draw on a chart</p> <p>4.5 Preview and print a chart</p>
<b>Course Outcome 5</b>	<b>Learning Objectives for Course Outcome 5</b>
5. Demonstrate an understanding of advanced features of formulas and functions.	<p>5.1 Create a formula with several operators</p> <p>5.2 Use names in a formula</p> <p>5.3 Generate multiple totals with AutoSum</p> <p>5.4 Use dates in calculations</p> <p>5.5 Build a conditional formula with the IF function</p> <p>5.6 Use statistical functions</p> <p>5.7 Calculate and print formula contents</p> <p>5.8 Freeze columns and rows</p> <p>5.9 Insert and delete worksheets</p> <p>5.10 Consolidate worksheets</p> <p>5.11 Hide and protect worksheet areas</p> <p>5.12 Control page breaks and page numbering</p> <p>5.13 Create a hyperlink between Excel files</p> <p>5.14 Save an Excel file as a Web page</p>
<b>Course Outcome 6</b>	<b>Learning Objectives for Course Outcome 6</b>
6. Demonstrate an understanding of automating worksheet tasks.	<p>6.1 Plan, record, run and edit a macro</p> <p>6.2 Use shortcut keys with macros</p> <p>6.3 Use the Personal Macro Workbook</p> <p>6.4 As a macro as a menu item</p> <p>6.5 Create a toolbar for macros</p>
<b>Course Outcome 7</b>	<b>Learning Objectives for Course Outcome 7</b>
7. Demonstrate an understanding of database concepts, terminology and screen layouts.	<p>7.1 Understand Relational database structure and setup</p> <p>7.2 Add, delete and change records in a table</p> <p>7.3 Open a database and work with the database window</p> <p>7.4 Preview and print a datasheet</p>
<b>Course Outcome 8</b>	<b>Learning Objectives for Course Outcome 8</b>
8. Demonstrate the use of tables and queries.	<p>8.1 Organize fields</p> <p>8.2 Plan, create and modify tables</p> <p>8.3 Format a datasheet</p> <p>8.4 Sort records and find data</p> <p>8.5 Filter records</p> <p>8.6 Create and modify queries</p>
<b>Course Outcome 9</b>	<b>Learning Objectives for Course Outcome 9</b>
9. Demonstrate the use of forms and reports	<p>9.1 Plan and create a form</p> <p>9.2 Move and resize controls</p> <p>9.3 Modify labels</p>

	<ul style="list-style-type: none"> <li>9.4 Use text boxes for calculations</li> <li>9.5 Modify tab order</li> <li>9.6 Enter, edit and print records</li> <li>9.7 Insert an image</li> <li>9.8 Plan and create a report</li> <li>9.9 Use group sections</li> <li>9.10 Change sort order</li> <li>9.11 Add calculations</li> <li>9.12 Align and format controls</li> <li>9.13 Change page layout</li> </ul>
<b>Course Outcome 10</b>	<b>Learning Objectives for Course Outcome 10</b>
10. Demonstrate the ability to modify database structure.	<ul style="list-style-type: none"> <li>10.1 Understand relational database components</li> <li>10.2 Create related tables using one-to-many relationships</li> <li>10.3 Create lookup fields</li> <li>10.4 Modify text, number, currency and date fields</li> <li>10.5 Modify field validation properties</li> </ul>
<b>Course Outcome 11</b>	<b>Learning Objectives for Course Outcome 11</b>
11. Demonstrate the ability to create multiple table queries	<ul style="list-style-type: none"> <li>11.1 Build select queries</li> <li>11.2 Sort a query on multiple fields</li> <li>11.3 Develop AND and OR criteria</li> <li>11.4 Create calculated fields</li> <li>11.5 Build summary and crosstab queries</li> </ul>
<b>Course Outcome 12</b>	<b>Learning Objectives for Course Outcome 12</b>
12. Demonstrate an understanding of basic SQL commands.	<ul style="list-style-type: none"> <li>12.1 Define and use SQL with Access</li> <li>12.2 Create SQL standard queries using single and multiple tables</li> <li>12.3 Update, delete and change records</li> <li>12.4 Perform calculations using SQL</li> <li>12.5 Use SQL to sort records</li> </ul>
<b>Course Outcome 13</b>	<b>Learning Objectives for Course Outcome 13</b>
13. Demonstrate an understanding of Data Mining techniques	<ul style="list-style-type: none"> <li>13.1 Define the role of Data Mining</li> <li>13.2 Search and analyze application databases for data extraction</li> <li>13.3 Parse data for export or import</li> <li>13.4 Export data to .CSV and Excel Formats</li> <li>13.5 Generate reports from selective mined data</li> </ul>

**Date:** August 28, 2018

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