
Computer Appl. for Business I (BCO108)

Northern College
Course Number:

IN1163

Applicable Program(s):

Multiple Programs

AAL:

Multiple Levels

Core/Elective:

Multiple Core/Elective

Approved by:

Dean Lessard, Dean, Business & Community Services

Approval Date:

Wednesday, August 29, 2018

Approved for Academic Year:

2018-2019

Normative Hours:

45.00

Course Description

In this course, students will have exposure to a comprehensive windows-based financial spreadsheet package to enhance their problem solving abilities. The package used will be Microsoft Excel for Windows. The student will use this as a tool to prepare various reports and presentations and applications which can be transferred in work commonly performed in the modern office. Students will gain hands on experience in learning and understanding the software, as well as creating and developing spreadsheet applications. Students will develop and enhance spreadsheets, charts, data lists, tables, macros and perform what-if analysis.

Course Learning Requirements

When you have earned credit for this course, you will have demonstrated the ability to:

- 1.) Perform fundamental tasks involving the operation of a spreadsheet package, recognizing that many of the same functions are found as in other spreadsheet productions.
- 2.) Formatting an Excel Worksheet.
- 3.) Working with Formulas and Functions.
- 4.) Create and enhance the representation of financial information with an Excel chart.
- 5.) Organize data to provide better financial information to interested users within the organization.
- 6.) Managing Multiple Worksheets and Workbooks.
- 7.) Developing an Excel Application.
- 8.) Using Advanced Functions and Conditional Formatting.
- 9.) Working with Financial Tools and Functions.
- 10.) Performing What-If Analysis.

Relationship to Essential Employability Skills

This course contributes to your program by helping you achieve the following Essential Employability Skills:

- | | |
|-------|--|
| 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. (T, A,) |
| EES 2 | Respond to written, spoken or visual messages in a manner that ensures effective communication. (T, A,) |
| EES 3 | Execute mathematical operations accurately. (T, A,) |
| EES 4 | Apply a systematic approach to solve problems. (T, A,) |
| EES 5 | Use a variety of thinking skills to anticipate and solve problems. (T, A,) |

- EES 6 Locate, select, organize and document information using appropriate technology and information systems. (T, A,)
- EES 7 Analyze, evaluate and apply relevant information from a variety of sources. (T, A,)
- EES 10 Manage the use of time and other resources to complete projects. (T, A,)
- EES 11 Take responsibility for one's own actions, decisions and consequences. (T, A,)

Relationship to Vocational Learning Outcomes

This course contributes to your program by helping you achieve the following Vocational Learning Outcomes:

Business Fundamentals

- VLO 3 use current technologies to support an organization's business initiatives (T, A,)
- VLO 4 apply basic research skills to support business decision making (T, A,)
- VLO 5 perform basic accounting procedures and financial calculations to support the operations of an organization (T, A,)

Business Fundamentals

- VLO 3 use current technologies to support an organization's business initiatives (T, A,)
- VLO 4 apply basic research skills to support business decision making (T, A,)
- VLO 5 perform basic accounting procedures and financial calculations to support the operations of an organization (T, A,)

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- VLO 4 apply basic research skills to support business decision making (T, A,)
- VLO 5 perform basic accounting procedures and financial calculations to support the operations of an organization (T, A,)

Business Fundamentals

- VLO 3 use current technologies to support an organization's business initiatives (T, A,)
- VLO 4 apply basic research skills to support business decision making (T, A,)

VLO 5 perform basic accounting procedures and financial calculations to support the operations of an organization (T, A,)

Learning Resources

New Perspectives Microsoft Excel Comprehensive

Cengage Learning by Parsons, Oja, Ageloff

Memory Stick (flash drive) 4GB or greater

Evaluation/Earning Credit

The following list of Evaluations/Earning Credits (EC) provides evidence of this course's learning achievements and the outcomes they validate:

EC 1 Assignments 40%

Validates Outcomes: EES 1, EES 2, EES 3, EES 4, EES 5, EES 6, EES 7, EES 10, EES 11

B287 : VLO 3, VLO 4, VLO 5

B287W : VLO 3, VLO 4, VLO 5

B288 : VLO 3, VLO 4, VLO 5

B289 : VLO 3, VLO 4, VLO 5

B292 : VLO 3, VLO 4, VLO 5

B292W : VLO 3, VLO 4, VLO 5

B294 : VLO 3, VLO 4, VLO 5

EC 2 Tests, Quizzes and Examinations 60%

Validates Outcomes: EES 1, EES 2, EES 3, EES 4, EES 5, EES 6, EES 7, EES 10, EES 11

B287 : VLO 3, VLO 4, VLO 5

B287W : VLO 3, VLO 4, VLO 5

B288 : VLO 3, VLO 4, VLO 5

B289 : VLO 3, VLO 4, VLO 5

B292 : VLO 3, VLO 4, VLO 5

B292W : VLO 3, VLO 4, VLO 5

B294 : VLO 3, VLO 4, VLO 5

Grade Scheme

COLLEGE GRADING NUMERICAL EQUIVALENT TABLE

Final Grade	Mark Equivalent	Final Grade	Mark Equivalent
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Northern College Statements

Department Related Information

Students who, for extenuating circumstances, (e.g. hospitalization, death in the family) are unable to meet assignment deadlines, must submit to the course professor, prior to the day of the deadline, a written request for an extension. Students who, for extenuating circumstances are unable to attend a scheduled test, must contact the course professor, the day of the test and request permission to write the test the day he/she returns to school.

Requests will be evaluated considering individual circumstances and approval is not guaranteed in all cases.

Scheduled tests and/or assignments will be returned to students within 10 working days. Students who are absent

Units involved in this Course.

Module 1: Introduction to Excel

Perform fundamental tasks involving the operation of a spreadsheet package, recognizing that many of the same functions are found as in other spreadsheet productions.

Unit 1: Introduction to Spreadsheets

Learning Resources:

Text

Knowledge and Skills Taught:

- Explain the use of spreadsheets and Excel
- Identify the parts of the Excel window
- Scroll through a worksheet and navigate between worksheets
- Create and save a workbook file
- Enter text, numbers, and dates into a worksheet
- Resize, insert, and remove columns and rows
- Select and move cell ranges
- Insert formulas and functions
- Insert, delete, move, and rename worksheets
- Create patterned text with Flash Fill
- Work with editing tools
- Preview and print a workbook

Vocational Learning Outcomes addressed by the Unit:

- B287 - VLO 3, 4, 5
- B287W - VLO 3, 4, 5
- B288 - VLO 3, 4, 5
- B289 - VLO 3, 4, 5
- B292 - VLO 3, 4, 5
- B292W - VLO 3, 4, 5
- B294 - VLO 3, 4, 5

Essential Employability Skills addressed by the Unit:

EES 1, 2, 3, 4, 5, 6, 7, 10, 11

Evaluations addressed by the Unit:

EC 1, 2

Unit 2: Formatting an Excel Worksheet

Learning Resources:

Text

Knowledge and Skills Taught:

- Format text, numbers, and dates
- Change font colors and fill colors

Add fill colours and background images
Create formulas to add, subtract, and divide values
Add number formats
Align, indent, and rotate cell contents
Merge a range into a single cell
Copy and paste functions
Apply a built-in cell style
Change the theme of a workbook
Create formulas to add and subtract values
Apply a built-in table style and select table style options
Highlight cells with conditional formats
Copy and paste formats with the Format Painter
Hide worksheet rows
Define the print area, insert page breaks, and add print titles
Enter headers and footers
Select page margins

Vocational Learning Outcomes addressed by the Unit:

B287 - VLO 3, 4, 5

B287W - VLO 3, 4, 5

B288 - VLO 3, 4, 5

B289 - VLO 3, 4, 5

B292 - VLO 3, 4, 5

B292W - VLO 3, 4, 5

B294 - VLO 3, 4, 5

Essential Employability Skills addressed by the Unit:

EES 1, 2, 3, 4, 5, 6, 7, 10, 11

Evaluations addressed by the Unit:

EC 1, 2

Unit 3: Working with Formulas and Functions

Learning Resources:Unit 3: Working with Formulas and Functions

Use Autofill to fill in a formula and complete a series
Use the TODAY,WORKDAY,COUNT,COUNTA functions
Enter the IF logical function
Perform an exact match lookup with the VLOOKUP function
Perform what-if analysis using trial and error and then Goal Seek

Vocational Learning Outcomes addressed by the Unit:

B287 - VLO 3, 4, 5
B287W - VLO 3, 4, 5
B288 - VLO 3, 4, 5
B289 - VLO 3, 4, 5
B292 - VLO 3, 4, 5
B292W - VLO 3, 4, 5
B294 - VLO 3, 4, 5

Essential Employability Skills addressed by the Unit:

EES 1, 2, 3, 4, 5, 6, 7, 10, 11

Evaluations addressed by the Unit:

EC 1, 2

Module 2: Working with Excel

Create and enhance the representation of financial information with an Excel chart.

Unit 1: Creating and Enhancing a Spreadsheet

Learning Resources:

Text

Knowledge and Skills Taught:

Use the PMT financial function to calculate monthly mortgage payments
Create an embedded chart
Create and format a pie chart
Work with chart titles and legends
Create and format a column chart
Create and format a line chart
Modify a chart data source
Create and format a combined chart
Create a 3D chart
Create and format sparklines and data bars
Create a chart sheet
Insert a watermark

Vocational Learning Outcomes addressed by the Unit:

B287 - VLO 3, 4, 5
B287W - VLO 3, 4, 5

B288 - VLO 3, 4, 5

B289 - VLO 3, 4, 5

B292 - VLO 3, 4, 5

B292W - VLO 3, 4, 5

B294 - VLO 3, 4, 5

Essential Employability Skills addressed by the Unit:

EES 1, 2, 3, 4, 5, 6, 7, 10, 11

Evaluations addressed by the Unit:

EC 1, 2

Unit 2: Organizing Data in Excel

Learning Resources:

Text

Knowledge and Skills Taught:

- Explore a structured range of data
- Freeze rows and columns
- Plan and create an Excel table
- Rename and format an Excel table
- Add, edit, and delete records in an Excel table
- Sort data
- Filter data
- Insert a Total row to summarize an Excel table
- Split a worksheet into two panes
- Insert subtotals into a range of data
- Use the Outlines buttons to show and hide details
- Create and modify a Pivot Table
- Apply Pivot Table styles and formatting
- Filter and sort a Pivot Table
- Insert a slicer to filter a Pivot Table
- Group Pivot Table items
- Create a Pivot Chart

Vocational Learning Outcomes addressed by the Unit:

B287 - VLO 3, 4, 5

B287W - VLO 3, 4, 5

B288 - VLO 3, 4, 5

B289 - VLO 3, 4, 5

B292 - VLO 3, 4, 5

B292W - VLO 3, 4, 5

B294 - VLO 3, 4, 5

Essential Employability Skills addressed by the Unit:

EES 1, 2, 3, 4, 5, 6, 7, 10, 11

Evaluations addressed by the Unit:

Module 3: Managing Worksheets, Applications and Advanced Functions of Excel

Managing Multiple Worksheets and Workbooks, Developing an Excel Application, and Working with Advanced Functions and Analysis using Excel.

Unit 1: Managing Multiple Worksheets and Workbooks

Learning Resources:

Text

Knowledge and Skills Taught:

- Create a worksheet group
- Format and edit multiple worksheets at once
- Create cell references to other worksheets
- Consolidate information from multiple worksheets using 3D references
- Create and print a worksheet group
- Create a link to data in another workbook
- Create a workbook reference
- Learn how to edit links
- Create and use an excel workspace
- Insert a hyperlink in a cell
- Create a sample template

Vocational Learning Outcomes addressed by the Unit:

B287 - VLO 3, 4, 5

B287W - VLO 3, 4, 5

B288 - VLO 3, 4, 5

B289 - VLO 3, 4, 5

B292 - VLO 3, 4, 5

B292W - VLO 3, 4, 5

B294 - VLO 3, 4, 5

Essential Employability Skills addressed by the Unit:

EES 1, 2, 3, 4, 5, 6, 7, 10, 11

Evaluations addressed by the Unit:

EC 1, 2

Unit 2: Developing an Excel Application

Learning Resources:

Text

Knowledge and Skills Taught:

Paste a list of defined names for documentation
Use defined names in formulas
Add defined names in existing formulas
Create validation rules for data entry
Protect the contents of worksheets and workbooks
Add, edit, and delete comments
Learn about macro viruses and Excel security features
Add the Developer tab to the Ribbon
Create and run a macro
Assign a macro to a keyboard shortcut and a button
Save and open a workbook in macro-enabled format
Minimize the Ribbon

Vocational Learning Outcomes addressed by the Unit:

B287 - VLO 3, 4, 5

B287W - VLO 3, 4, 5

B288 - VLO 3, 4, 5

B289 - VLO 3, 4, 5

B292 - VLO 3, 4, 5

B292W - VLO 3, 4, 5

B294 - VLO 3, 4, 5

Vocational Learning Outcomes addressed by the Unit:

B287 - VLO 3, 4, 5

Learning Resources:

Text

Knowledge and Skills Taught:

Explore the principles of cost-volume-profit relationships

Perform a basic what-if analysis

Use goal seek to calculate a solution

Create a one-variable data table

Create a two-variable data table

Vocational Learning Outcomes addressed by the Unit:

B287 - VLO 3, 4, 5

B287W - VLO 3, 4, 5

B288 - VLO 3, 4, 5

B289 - VLO 3, 4, 5

B292 - VLO 3, 4, 5

B292W - VLO 3, 4, 5

B294 - VLO 3, 4, 5

Essential Employability Skills addressed by the Unit:

EES 1, 2, 3, 4, 5, 6, 7, 10, 11

Evaluations addressed by the Unit:

EC 1, 2

Legend

Terms

- ALO: Aboriginal Learning Outcome
- Apprenticeship LO: Apprenticeship Learning Outcome
- CLR: Course Learning Requirement
- DPLO: Degree Program Learning Outcome
- EC: Earning Credit
- EES: Essential Employability Skill
- EOP: Element of Performance
- GELO: General Education Learning Outcome
- LO: Learning Outcome
- PC: Program Competency
- PLA: Prior Learning Assessment
- PLAR: Prior Learning Assessment and Recognition
- VLO: Vocational Learning Outcome

Assessment Levels

- T: Taught
- A: Assessed