

# COURSE OUTLINE: BCO0118 - COMPUTER APPLICATION

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BC00118: COMPUTER APPLICATIONS FOR BUSINESS CICE
1120: COMMUNITY INTEGRATN
C.I.C.E.
19F, 20F
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 2016 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.
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45
There are no pre-requisites for this course.
There are no co-requisites for this course.
<ul> <li>EES 3 Execute mathematical operations accurately.</li> <li>EES 4 Apply a systematic approach to solve problems.</li> <li>EES 5 Use a variety of thinking skills to anticipate and solve problems.</li> <li>EES 6 Locate, select, organize, and document information using appropriate technology and information systems.</li> <li>EES 10 Manage the use of time and other resources to complete projects.</li> <li>EES 11 Take responsibility for ones own actions, decisions, and consequences.</li> </ul>
A+ = 90-100% A = 80-89% B = 70-79% C = 60-69% D = 50-59% F < 50%
New Perspectives Microsoft Office 365 & Excel 2016: Comprehensive + MindTap Computing by Parsons Publisher: Course Technology ISBN: 13-978-1-337-06941-0
Upon successful completion of this course, the CICE student, with the assistance of a Learning Specialist will acquire varying levels of skill development relevant to the following learning

Learning Objectives for Course Outcome 1
Understand the use of spreadsheets and Excel. Learn 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 (if 2013 version used). Work with editing tools. Preview and print a workbook.
Learning Objectives for Course Outcome 2
Format text, numbers, and dates. Change font colors and fill colours. 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.
Learning Objectives for Course Outcome 3
Copy formulas. Build formulas containing relative, absolute and mixed references. Review function syntax. Enter formulas and functions with the Quick Analysis Tool. Insert a function with the Insert Function dialogue box. Interpret error values. Search for a function. Type a function directly in a cell. 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. Use the PMT financial function to calculate monthly mortgage

Create and enhance the representation of financial information with an Excel chart.	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.
Course Outcome 5	Learning Objectives for Course Outcome 5
Organize data to provide better financial information to interested users within the organization.	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.
Course Outcome 6	Learning Objectives for Course Outcome 6
Managing multiple worksheets and workbooks.	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.
Course Outcome 7	Learning Objectives for Course Outcome 7
Developing an Excel application.	Create an application. Create, edit, and delete defined names for cells and ranges. 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.		
Course Outcome 8	Learning Objectives for Course Outcome 8		
Using advanced functions and conditional formatting.	Use the IF function for single and nested conditions. Use the AND function. Use the OR function. Use structured references in formulas. Use the VLOOKUP function. Review the HLOOKUP function. Use the IFERROR function. Use the conditional formatting to highlight duplicate values. Summarize data using the COUNTIF, SUMIF, and AVERAGEIF functions.		
Course Outcome 9	Learning Objectives for Course Outcome 9		
Working with financial tools and functions.	Use the PV,FV,PMT and NPER functions. Work with financial functions to analyze loans and investments. Create an amortization schedule. Calculate a conditional sum. Interpolate and extrapolate a series of values. Calculate a depreciation schedule. Determine a payback period. Calculate a net present value. Calculate an internal rate of return. Trace a formula error to its source.		
Course Outcome 10	Learning Objectives for Course Outcome 10		
Performing what-if analysis.	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.		

Evaluation Process and Grading System:	Evaluation Type	Evaluation Weight
	Assignments	40%
	Final Exam (Comprehensive)	30%
	Term Test	30%

# **CICE Modifications:**

#### **Preparation and Participation**

1. A Learning Specialist will attend class with the student(s) to assist with inclusion in the class and to take notes.

2. Students will receive support in and outside of the classroom (i.e. tutoring, assistance with homework and assignments, preparation for exams, tests and quizzes.)

3. Study notes will be geared to test content and style which will match with modified learning outcomes.

4. Although the Learning Specialist may not attend all classes with the student(s), support will always be available. When the Learning Specialist does attend classes he/she will remain as

inconspicuous as possible.

**A.** Further modifications may be required as needed as the semester progresses based on individual student(s) abilities and must be discussed with and agreed upon by the instructor.

# B. Tests may be modified in the following ways:

1. Tests, which require essay answers, may be modified to short answers.

2. Short answer questions may be changed to multiple choice or the question may be simplified so the answer will reflect a basic understanding.

3. Tests, which use fill in the blank format, may be modified to include a few choices for each question, or a list of choices for all questions. This will allow the student to match or use visual clues.

4. Tests in the T/F or multiple choice format may be modified by rewording or clarifying statements into layman's or simplified terms. Multiple choice questions may have a reduced number of choices.

## C. Tests will be written in CICE office with assistance from a Learning Specialist.

## The Learning Specialist may:

1. Read the test question to the student.

- 2. Paraphrase the test question without revealing any key words or definitions.
- 3. Transcribe the student's verbal answer.
- 4. Test length may be reduced and time allowed to complete test may be increased.

## D. Assignments may be modified in the following ways:

1. Assignments may be modified by reducing the amount of information required while maintaining general concepts.

2. Some assignments may be eliminated depending on the number of assignments required in the particular course.

#### The Learning Specialist may:

1. Use a question/answer format instead of essay/research format

- 2. Propose a reduction in the number of references required for an assignment
- 3. Assist with groups to ensure that student comprehends his/her role within the group

4. Require an extension on due dates due to the fact that some students may require additional time to process information

5. Formally summarize articles and assigned readings to isolate main points for the student 6. Use questioning techniques and paraphrasing to assist in student comprehension of an assignment

#### E. Evaluation:

Is reflective of modified learning outcomes.

**NOTE:** Due to the possibility of documented medical issues, CICE students may require alternate methods of evaluation to be able to acquire and demonstrate the modified learning outcomes

Date: October 4, 2019

Addendum:

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

information.