Department:

Business

Course Description:

This course focuses on Microsoft Excel spreadsheet concepts and applications and using the spreadsheet as a tool in processing information.

Course Competencies:

Upon completion of the course, the student should be able to:

1. Create and design professional worksheets.
2. Create and print a variety of graphs.
3. Create Web pages.
4. Integrate a database with Excel.

Course Content:

A. Getting Started with Excel
   1. Cloud computing
   2. Understanding formulas
   3. Entering labels and values and using the sum button
   4. Switching worksheet views
   5. Understanding named ranges
   6. Printing formulas
   7. Scaling to fit
B. Working with Formulas and Functions
   1. Creating complex formulas
   2. Order of precedence
   3. Inserting and typing functions
   4. Using the COUNT and COUNTA functions
   5. Copying and moving cell entries
   6. Relative and absolute cell references
   7. Auto-fill options
   8. Copying formulas with relative and absolute cell references
   9. Rounding a value with a functions
   10. Creating a workbook using a template
C. Formatting a Worksheet
   1. Formatting as a table
   2. Inserting and adjusting clip art and other images
   3. Rotating and indenting cell entries
   4. Changing font styles and alignment
5. Adjusting column width and row height
6. Inserting and deleting rows and columns
7. Hiding and unhiding columns and rows
8. Adding and editing comments
9. Applying colors, patterns, and borders
10. Working with themes and cell styles
11. Applying conditional formatting
12. Renaming and moving a worksheet
13. Checking spelling
14. E-mailing a workbook

D. Working with Charts
1. Creating Sparklines
2. Moving and resizing a chart
3. Creating a combination chart
4. Working with a 3-D chart
5. Changing the chart layout
6. Adding data labels
7. Changing alignment and angle in axis labels and titles
8. Annotating and drawing on a chart
9. Adding SmartArt graphics
10. Creating a pie chart

E. Analyzing Data Using Formulas
1. Formatting data using text functions
2. Summing a data range based on conditions
3. Consolidating data using a formula
4. Checking formulas for errors
5. Constructing formulas using named ranges
6. Building a logical formula with the IF and AND functions
7. Using the OR and NOT logical functions
8. Calculating payments with the PMT function
9. Calculating future value with the FV function

F. Managing Workbook Data
1. Splitting the worksheet into multiple panes
2. Freezing rows and columns
3. Protecting worksheets and workbooks
4. Saving custom views of a worksheet
5. Adding a worksheet background
6. Preparing a workbook for distribution
7. Inserting hyperlinks
8. Saving a workbook for distribution
9. Adding a digital signature to a workbook

G. Managing Data Using Tables
1. Creating and formatting a table
2. Changing table style options
3. Finding and replacing table data
4. Sorting a table using conditional formatting
5. Using formulas in a table

H. Analyzing Table Data
1. Filtering a table
2. Creating a custom filter
3. Filtering a table with the advanced filter
4. Extracting table data
5. Finding records using the DGET function
6. Using the HLOOKUP and MATCH functions
7. Summarizing Table Data
8. Validating table data
9. Creating subtotals

I. Automating Worksheet Tasks
1. Planning, enabling, recording, running, and editing a macro
2. Assigning keyboard shortcuts to macros
3. Assigning a macro to a button

J. Enhancing Charts
1. Customizing a data series
2. Changing a data source and adding data labels
3. Moving, removing, and formatting legends
4. Formatting the axes of a chart
5. Adding a data table to a chart
6. Rotating a chart
7. Enhancing a chart with WordArt and pictures
8. Adding Sparklines to a worksheet
9. Identifying data trends

K. Using What-if Analysis
1. Tracking a what-if analysis with scenario manager
2. Generating a scenario summary
3. Projecting figures using a data table
4. Using goal seek
5. Setting up a complex what-if analysis with solver, running solver and summarizing results
6. Analyzing data using the analysis ToolPak

L. Analyzing Data with Pivot Tables
1. Creating a pivot table report
2. Filtering and sorting pivot table data
3. Changing a pivot table structure and format
4. Using the GETPIVOTDATA Function

M. Exchanging Data with Other Programs
1. Importing a text file
2. Importing a database table
3. Inserting a graphic file in a worksheet
4. Embedding a workbook in a Microsoft Word document
5. Linking a workbook to a Word document
6. Linking an Excel chart to a Microsoft Power Point slide
7. Importing a table into Microsoft Access

Learning Assessments:

Course competencies will be assessed by end-of-project activities that demonstrate the ability to use proper procedures to create worksheets.

Instructional Materials:


Guidelines for Requesting Accommodations Based on Documented Disability or Medical Condition

It is the intention of Highland Community College to work toward full compliance with the Americans with Disabilities Act, to make instructional programs accessible to all people, and to provide reasonable accommodations according to the law.

Students should understand that it is their responsibility to self-identify their need(s) for accommodation and that they must provide current, comprehensive diagnosis of a specific disability or medical condition from a qualified professional in order to receive services. Documentation must include specific recommendations for accommodation(s). Documentation should be provided in a timely manner prior to or early in the semester so that the requested accommodation can be considered and, if warranted, arranged.

In order to begin the process all students must complete the “Disabilities Self-Identification Form” at this link: https://highlandcc.edu/pages/disability-services.

This form can also be accessed at the Highland Community College homepage under Students Services/Student Resources/Disability Service or by contacting the Disabilities Coordinator.