



Western Technical College

10103107 Introduction to Microsoft Excel and Access

Course Outcome Summary

Course Information

Description	Designed to introduce students to the desktop and operating system of a personal computer, basic features of Microsoft Excel, and basic features of Microsoft Access. Electronic file management (directories and folders) will also be covered.
Career Cluster	Information Technology
Instructional Level	Associate Degree Courses
Total Credits	3
Total Hours	72

Pre/Corequisites

Prerequisite 10106112 Business Formatting

Textbooks

The Shelly Cashman Series Microsoft Office 365 & Excel 2021 Comprehensive with MindTap and Printed Access Card. 1st Edition. Copyright 2023. Freund, Steven M. and Joy L. Starks. Publisher: Cengage Learning. **ISBN-13:** 978-0-357-67697-4. Required.

The Shelly Cashman Series Microsoft 365 & Office 2021 Introductory. 1st Edition. Copyright 2023. Cable, Sandra, Steven M. Freund, Ellen Monk, Susan Sebok, Joy L. Starks, and Misty E. Vermaat. Publisher: Cengage Learning. **ISBN-13:** 978-0-357-67678-3. Required.

MindTap for The Shelly Cashman Series Microsoft 365 & Office 2021 Introductory. 1st Edition. Copyright 2023. Cable, Sandra, Steven M. Freund, Ellen Monk, Susan Sebok, Joy L. Starks, and Misty E. Vermaat. Publisher: Cengage Learning. **ISBN-13:** 978-0-357-67667-7. Required.

Learner Supplies

Webcam and headset with microphone. **Vendor:** To be discussed in class. Required.

Success Abilities

1. Cultivate Passion: Expand a Growth-Mindset
2. Live Responsibly: Embrace Sustainability
3. Refine Professionalism: Act Ethically
4. Refine Professionalism: Improve Critical Thinking

Program Outcomes

1. Demonstrate effective workplace communications
2. Apply technology skills to business and administrative tasks
3. Manage administrative projects
4. Model professionalism in the workplace

Course Competencies

1. Create an electronic spreadsheet workbook.

Assessment Strategies

- 1.1. Skills Exam
- 1.2. Objective Exam

Criteria

You will know you are successful when

- 1.1. you open a workbook
- 1.2. you explain the features of the workbook window
- 1.3. you create a worksheet with labels and values
- 1.4. you print the workbook
- 1.5. you use the spreadsheet HELP feature
- 1.6. you save the workbook

Learning Objectives

- 1.a. Describe the spreadsheet worksheet
- 1.b. Enter text and numbers
- 1.c. Copy the contents of a cell to a range of cells using the fill handle
- 1.d. Change a worksheet name and sheet tab color
- 1.e. Change document properties
- 1.f. Use spreadsheet terminologies
- 1.g. Print a worksheet
- 1.h. Print worksheet displaying formulas
- 1.i. Save a workbook

2. Format electronic spreadsheets.

Assessment Strategies

- 2.1. Skills Exam
- 2.2. Objective Exam

Criteria

You will know you are successful when

- 2.1. you use fonts in the worksheet
- 2.2. you align cells in the worksheet
- 2.3. you use style templates in the worksheet
- 2.4. you format the worksheet
- 2.5. you format multiple sheets
- 2.6. you apply color in the worksheet

Learning Objectives

- 2.a. Format cells in a worksheet (fonts styles, font sizes, and font colors)
- 2.b. Align cell content across columns
- 2.c. Apply cell styles
- 2.d. Apply a style template to a range
- 2.e. Insert/delete columns and rows
- 2.f. Change number formats
- 2.g. Add lines, frames, and color
- 2.h. Change column widths and heights
- 2.i. Display system date on the worksheet
- 2.j. Use spreadsheet terminologies

3. Create formulas to enhance electronic spreadsheets.

Assessment Strategies

- 3.1. Skills Exam
- 3.2. Objective Exam

Criteria

You will know you are successful when

- 3.1. you write and enter formulas
- 3.2. you use the SUM button to sum a range of cells
- 3.3. you use arithmetic operators
- 3.4. you use IF function
- 3.5. you use built-in functions (AVERAGE, MAX, MIN, and PMT)
- 3.6. you analyze "what-if" scenarios

Learning Objectives

- 3.a. Determine calculations required for the worksheet
- 3.b. Use SUM function
- 3.c. Use arithmetic operators to create formulas
- 3.d. Use the IF function to perform a logical test
- 3.e. Identify components of a formula
- 3.f. Use built-in spreadsheet functions (AVERAGE, MAX, MIN, and PMT)
- 3.g. Copy formulas to other cells
- 3.h. Edit or undo formulas
- 3.i. Use relative and absolute cell references
- 3.j. Create and use cell and range names
- 3.k. Use formulas in "what-if" analysis (changing values and Goal Seek)
- 3.l. Use spreadsheet terminologies

4. Generate charts using electronic spreadsheet data.

Assessment Strategies

- 4.1. Skills Exam
- 4.2. Objective Exam

Criteria

You will know you are successful when

- 4.1. you select appropriate chart to display information
- 4.2. you create charts (3-D pie and clustered column)
- 4.3. you edit a chart
- 4.4. you format a chart
- 4.5. you print the chart

Learning Objectives

- 4.a. Determine appropriate chart type to display information
- 4.b. Select range from worksheet to create the chart
- 4.c. Identify the components of a chart
- 4.d. Create a charts (3-D pie and clustered column)
- 4.e. Change the chart type
- 4.f. Move the chart to a different location on the worksheet
- 4.g. Insert a new worksheet for the chart
- 4.h. Resize the chart
- 4.i. Edit the chart
- 4.j. Format the chart
- 4.k. Change chart objects
- 4.l. Print chart worksheet
- 4.m. Use spreadsheet terminologies

5. Create multiple sheet electronic spreadsheets.

Assessment Strategies

- 5.1. Skills Exam
- 5.2. Objective Exam

Criteria

You will know you are successful when

- 5.1. you create a multiple sheet workbook
- 5.2. you create a consolidated worksheet
- 5.3. you use 3-D range
- 5.4. you group worksheets

Learning Objectives

- 5.a. Determine sheets necessary in a multiple sheet workbook
- 5.b. Insert worksheets as necessary in the workbook
- 5.c. Copy data between worksheets
- 5.d. Create 3-D range in a formula
- 5.e. Create a consolidated worksheet using information from other worksheets
- 5.f. View multiple worksheets
- 5.g. Group the worksheets
- 5.h. Use spreadsheet terminology

6. Define the components of a database and database objects.

Assessment Strategies

- 6.1. Written Objective Test

Criteria

You will know you are successful when

- 6.1. you explain database applications
- 6.2. you identify components of the database window
- 6.3. you determine the tables and fields in a database
- 6.4. you determine the primary key and data types used in a database

Learning Objectives

- 6.a. Define database applications
- 6.b. Identify the components of the database window
- 6.c. Determine the naming of tables and fields in a database
- 6.d. Determine the primary key and data types in a database

7. Create a database.

Assessment Strategies

- 7.1. Skills Exam
- 7.2. Objective Exam

Criteria

You will know you are successful when

- 7.1. you identify the objects needed to create database
- 7.2. you identify the fields needed for each records in a table
- 7.3. you add records to the table
- 7.4. you import data from a spreadsheet workbook to a table
- 7.5. you create a form, queries, and a report
- 7.6. you print a database

Learning Objectives

- 7.a. Identify the objects needed to create a database
- 7.b. Identify the fields needed for each records in a table
- 7.c. Create tables with a primary key
- 7.d. Print a database table
- 7.e. Import data from a spreadsheet
- 7.f. Create simple queries
- 7.g. Create a database form
- 7.h. Create a database report
- 7.i. Add database properties
- 7.j. Print database objects

8. Create queries in a database.

Assessment Strategies

- 8.1. Skills Exam
- 8.2. Objective Exam

Criteria

You will know you are successful when

- 8.1. you create queries to retrieve data from a database
- 8.2. you export database data
- 8.3. you create queries with calculations
- 8.4. you create a crosstab query

Learning Objectives

- 8.a. Create queries in design view
- 8.b. Include fields in design grid
- 8.c. Use text data and a numeric data to query a database
- 8.d. Use a wildcard to query a database
- 8.e. Create a parameter query
- 8.f. Use comparison operators (AND & OR) in a query
- 8.g. Sort data and omit duplicates in a query
- 8.h. Join tables in queries
- 8.i. Export data from a database to other applications
- 8.j. Perform calculations and calculate statistics in queries
- 8.k. Create a crosstab query
- 8.l. Customize the navigation pane

9. Maintain a database.

Assessment Strategies

- 9.1. Skills Exam
- 9.2. Objective Exam

Criteria

You will know you are successful when

- 9.1. you add, change, and delete records
- 9.2. you use filter
- 9.3. you add a new fields to table
- 9.4. you create validation rules

- 9.5. you use and change fields
- 9.6. you change the appearance of the database
- 9.7. you create referential integrity between related database tables

Learning Objectives

- 9.a. Update records in a database
- 9.b. Search for records in a database
- 9.c. Filter records in a database
- 9.d. Change the database structure
- 9.e. Make mass changes to a table
- 9.f. Create validation rules
- 9.g. Create and use single-valued and multivalued lookup field
- 9.h. Change the appearance of the database
- 9.i. Specify referential integrity

10. Develop database reports and forms.

Assessment Strategies

- 10.1. Skills Exam
- 10.2. Objective Exam

Criteria

You will know you are successful when

- 10.1. you create a form and reports from a database
- 10.2. you create reports and form using wizards
- 10.3. you group and sort records in a report
- 10.4. you add calculations to reports and forms
- 10.5. you conditionally format controls
- 10.6. you resize, apply themes, add fields, change control format, and move controls
- 10.7. you create mailing labels
- 10.8. you print reports, forms, and mailing labels.
- 10.9. you filter records in reports and forms

Learning Objectives

- 10.a. Create forms and reports from a query
- 10.b. Add new fields to an existing report
- 10.c. Create reports and forms using wizards
- 10.d. Modify reports and forms in layout view
- 10.e. Group, sort, and total report data
- 10.f. Conditionally format report controls
- 10.g. Filter records in reports and forms
- 10.h. Create a multiple-table report
- 10.i. Modify controls on reports and forms
- 10.j. Filter form records
- 10.k. Create mailing labels