Multi–State
Advanced Manufacturing
Consortium

US DOL SPONSORED TAACCCT GRANT: TC23767
PRIMARY DEVELOPER: Reggie Fluker – Henry Ford College

RELEASE DATE	12/21/2015
VERSION	v 002
PAGE	1 of 10

Digital Literacy II: Office Productivity
Unit 3 Spreadsheets
LAB 1 Excel Fundamentals

Objectives

- Identify elements of Excel's interface
- Create and manage workbooks and sheets
- Enter, edit, and format data
- Sort, filter, and illustrate data

Equipment Required

- Notebook computer
- Microsoft Excel 2013

Introduction

In this lab, you will demonstrate your ability to navigate Microsoft Excel and perform fundamental skills to construct worksheets, edit, format, and organize data, and create charts to visually represent data. These skills are necessary to create a variety of business and personal spreadsheets in Excel.

In order to perform the lab Procedure, you should know how to:

- Navigate the Excel environment
- Identify and describe elements in Excel's interface
- Create, open, and save workbooks
- Insert, rename, and hide worksheets
- Move, copy, and delete sheets
- Enter and edit data
- Format cells, columns, and rows
- Sort and filter data
- Create charts

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RELEASE DATE	12/21/2015
VERSION	v 002
PAGE	2 of 10

Digital Literacy II: Office Productivity
Unit 3 Spreadsheets
LAB 1 Excel Fundamentals

Procedure

EXCEL INTERFACE

1. Review Diagram 1 at the end of this Procedure; fill-in the blanks to match numbers in the diagram with the descriptions below

     a. _____ Command Group: each group contains a series of different command buttons

     b. _____ Ribbon: contains all of the commands you will need to perform common tasks

     c. _____ Account Access: access Microsoft account information

     d. _____ Name Box: displays the location or 'name' of a selected cell

     e. _____ Worksheet Views: switch between Normal, Page Layout, and Page Break views

     f. _____ Formula Bar: enter and edit data, formulas, and functions

     g. _____ Quick Access Toolbar lets you access common commands no matter which tab is selected

     h. _____ Scroll Bars: click, hold, and drag to scroll up and down or left and right in a spreadsheet

     i. _____ Cell: the rectangle that is formed at the intersection of a column and a row

     j. _____ Column: a group of cells, identified by a letter, that runs from top to bottom of the sheet

     k. _____ Zoom Control: click, hold, and drag the slider to zoom-in or –out

     l. _____ Worksheets/Sheet Tabs: Each Excel file (workbook) contains one or more worksheets

     m. _____ Row: a group of cells, identified by a number, that runs from left to right on a sheet

2. Review Diagram 2 at the end of this Procedure; fill-in the blanks to match numbers in the diagram with the descriptions below

     a. _____ Change Excel settings such as spell check, AutoRecover, and language preferences

     b. _____ Create a blank document or choose a template

     c. _____ Close Backstage view and return to the document

     d. _____ Show information about the current document

     e. _____ Preview the document, adjust settings, and output to a printer

     f. _____ Access recent documents saved on your computer or OneDrive

     g. _____ Store a new document or revised document on your computer or OneDrive

     h. _____ Exit the current document

     i. _____ Allow others to view and collaborate on a document

     j. _____ Convert a document into a PDF format

     k. _____ Access your Microsoft profile, modify theme and background settings, and sign out

Multi–State Advanced Manufacturing Consortium
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RELEASE DATE	12/21/2015
VERSION	v 002
PAGE	3 of 10

Digital Literacy II: Office Productivity
Unit 3 Spreadsheets
LAB 1 Excel Fundamentals

CREATING, SAVING, and OPENING WORKBOOKS

3. Launch Microsoft Excel 2013

4. Create a new blank workbook

5. Create a new workbook based on any template of your choice

6. Save the workbook to your Documents folder as "MyTemplate1.xlsx"

7. Close the document

8. Within Excel, **browse your computer** to locate and open "MyTemplate1. xlsx"

9. Save the document as "MyTemplate2. xlsx"

10. Pin "MyTemplate2. xlsx" to the Backstage view

11. Export "MyTemplate2. xlsx" in a PDF format

12. Close all workbooks

WORKSHEET BASICS

13. Open the workbook "Excel2013_SheetBasics.docx" (enable editing if necessary)

14. Rename each worksheet to the month's abbreviation. For example, rename "January" to "Jan"

15. Insert a new worksheet and name it "temp"

16. Delete sheets "Sheet4"

17. Copy sheet "Mar" and rename it to "Apr"

18. Re-arrange the sheet tabs into the following order: Apr, Mar, Feb, Jan, temp

ENTERING and EDITING DATA

19. Open the workbook "Excel2013_CellBasics.docx" (enable editing if necessary)

20. Complete the following steps while being observed by the lab instructor:

    a. Select cell B3

    b. Select the range of cells from A3 to E6

    c. In cell C5, enter "Josie"

    d. Delete **the contents** of cell D6

    e. Delete cell D3 shifting cells to the left (after completing this step, D3 should contain "Friday, March 08, 2013" and E3 should be empty)

    f. Enter "Wendy" in C6

Multi–State Advanced Manufacturing Consortium	RELEASE DATE	12/21/2015
	VERSION	v 002
US DOL SPONSORED TAACCCT GRANT: TC23767	PAGE	4 of 10

PRIMARY DEVELOPER: Reggie Fluker – Henry Ford College

Digital Literacy II: Office Productivity
Unit 3 Spreadsheets
LAB 1 Excel Fundamentals

    g.   Copy and paste the contents of D5 into D6

    h.   Enter "Loretta" and "Walter" in cells C7 and C8, respectively

    i.   Cut and paste the contents of D4 into D7

    j.   Drag and drop the contents of D5 into D8

    k.   Select cell D6

    l.   Use the fill-handle to copy D6 contents into D5 and D4

    m. Use the fill-handle to enter "Saturday, March 09, 2013" into cell E3

    n.   Use the Find window to locate the entry for Ms. Fontaine

    o.   Use Find and Replace to change "vestainsurance.**com**" to "vestainsurance.**net**" throughout the entire worksheet

ADJUSTING COLUMNS and ROWS

21. Open the workbook "Excel2013_ModColRow.docx" (enable editing if necessary)

22. Manually adjust the width of column A to fit the contents of cells A2 through A23

23. AutoFit the width of column B to fit the contents of all cells in the column

24. Insert a column between column C and column D

25. Enter "Home Phone" in D2

26. Insert a row between row 1 and row 2

27. Make the height of row 2 smaller, similar to:

	A	B	C	D	
1	Bulls Team Roster: Co-ed Softball 2013				
2					
3	First Name	Last Name	Cell Phone	Street Address	City, State,
4	Bonnie	Benjamin	502-555-1212	2937 Earnhardt Drive	

28. Delete column E

29. Delete the row of data for Mildred Persinger

30. Move column E (Positions) and place it between column B (Last Name) and column C (Cell Phone)

31. Hide column D and column E

32. Complete the following steps while being observed by the lab instructor:

    a.   Unhide columns D and E

Digital Literacy II: Office Productivity
Unit 3 Spreadsheets
LAB 1 Excel Fundamentals

FORMATTING CELLS

33. Open the document "Excel2013_FormatCells.docx" (enable editing if necessary)

34. Format cell A3 as follows:

    a. Font-type: Cambria

    b. Font-size: 26pt

    c. Font-color: a dark shade of yellow

    d. Font-style: bold

35. Center-align the data in columns D, E, F, and G

36. Middle-align the data in rows 4 through 37

37. Apply "All Borders" to the range of cells from A4 through G37

38. Format cells A4 through G4 as follows:

    a. Border: thick box border

    b. Fill-color: light-gray

39. Apply the "Long Date" format to cells D4 through G4

40. Review Diagram 3 at the end of this Procedure; fill-in the blanks to match numbers in the diagram with the descriptions below

    a. _____ Formats numbers with a dollar sign and two decimal places

    b. _____ Default format for any cell

    c. _____ Formats "0.25" as "¼"

    d. _____ Formats numbers with two decimal places

    e. _____ Formats "12/1/2015" as "Tuesday, December 01, 2015"

    f. _____ Formats numbers similar to "10:25:00 AM"

    g. _____ Formats numbers with a percent sign and decimal places

    h. _____ Formats "140000" as "1.40E+05"

    i. _____ The default format if a cell contains letters and numbers

    j. _____ Formats numbers as Currency, but also aligns currency symbols and decimal points

    k. _____ Formats "Dec 1, 2015" as "12/1/2015"

    l. _____ Customize number formats

Digital Literacy II: Office Productivity
Unit 3 Spreadsheets
LAB 1 Excel Fundamentals

SORTING DATA

41. Open the document "Excel2013_Sorting.docx" (enable editing if necessary)

42. Sort the Totals table in descending order by date (April 26, 2013 should be first)

43. Sort the order-details table by multiple columns in the following order:

    a. Home Room #: Ascending

    b. Payment Method: Descending

    c. T-Shirt Size: Descending

    d. Last Name: Ascending

FILTERING DATA

44. Open the document "Excel2013_Filtering.docx" (enable editing if necessary)

45. Filter the "Type" column (column B) so it displays only laptops and cameras

46. Add another filter by searching for EDI brand equipment in the Equipment Detail column (column C)

47. While being observed by the lab instructor, clear both filters

CHARTS

48. Open the document "Excel2013_Charts.docx" (enable editing if necessary)

49. Create a chart using cells A1 through F6 as the source data

50. Change the chart layout to Layout 8

51. Apply a chart style

52. Move the chart to a new worksheet named Book Sales Data 2008-2012.
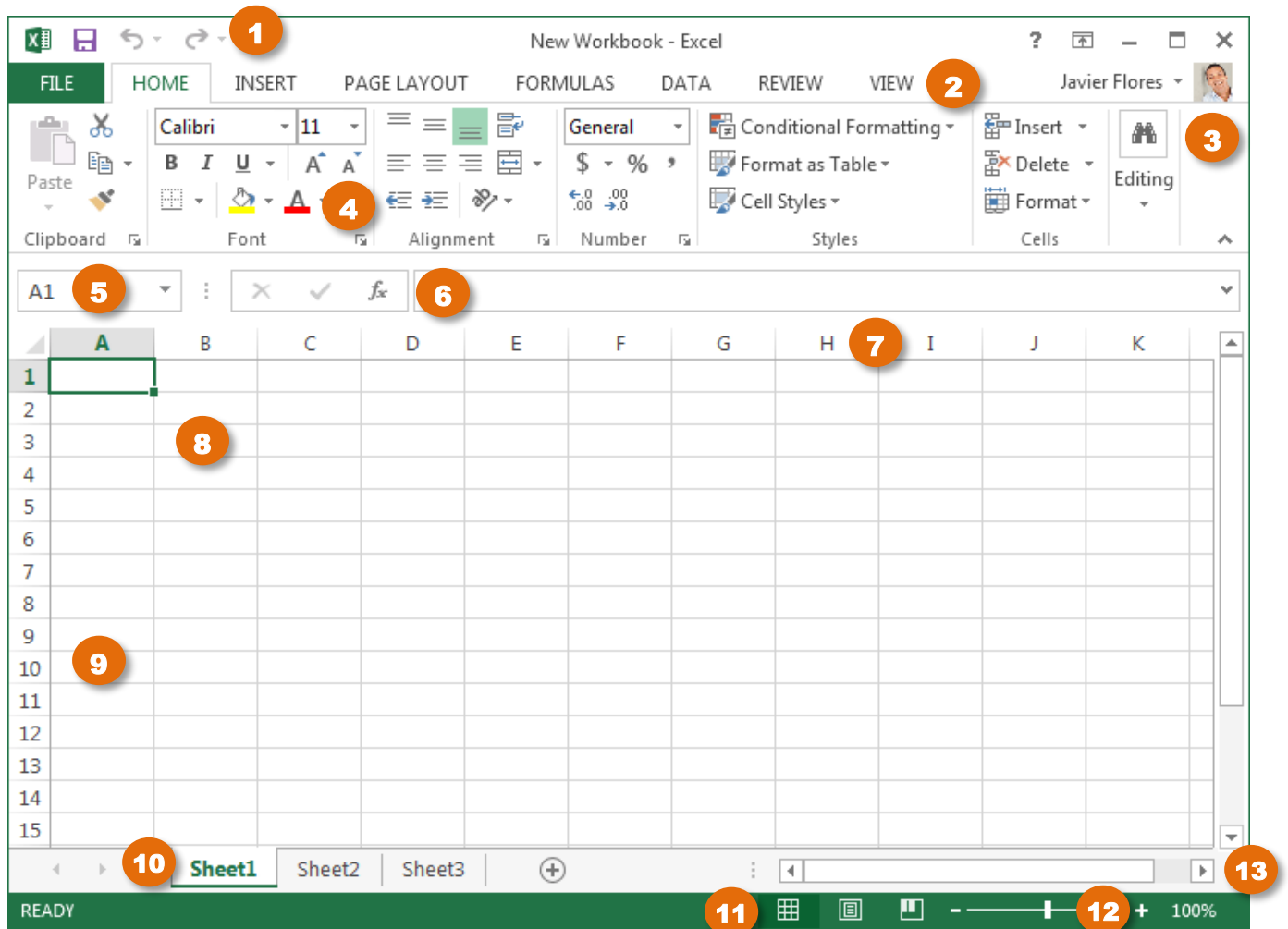

End Procedure

Digital Literacy II: Office Productivity
Unit 3 Spreadsheets
LAB 1 Excel Fundamentals

DIAGRAM 1

20151221_v002_msamc_tafd_117.2.3_lab1_student.pdf found in Resources by
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Digital Literacy II: Office Productivity

Unit 3 Spreadsheets

LAB 1 Excel Fundamentals

DIAGRAM 2

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RELEASE DATE	12/21/2015
VERSION	v 002
PAGE	9 of 10

Digital Literacy II: Office Productivity
Unit 3 Spreadsheets
LAB 1 Excel Fundamentals

DIAGRAM 3

1. **General** – No specific format
2. **Number** – 12
3. **Currency**
4. **Accounting**
5. **Short Date**
6. **Long Date**
7. **Time**
8. **Percentage** – %
9. **Fraction** – ½
10. **Scientific** – 10^2
11. **Text** – ABC
12. More Number Formats...

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RELEASE DATE	12/21/2015
VERSION	v 002
PAGE	10 of 10

Digital Literacy II: Office Productivity
Unit 3 Spreadsheets
LAB 1 Excel Fundamentals

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