

Component I: Core

Module E: Computers

Topic 3: Introduction to Spreadsheets

Statement of Purpose

To prepare the learner with basic knowledge and skills necessary to use a spreadsheet application.

Student Learning Outcomes

Upon completion of this topic, the learner will be able to:

1. Spell and define key terms.
2. Prepare and format a spreadsheet.(Note that a spreadsheet is also called a worksheet and multiple worksheets are a workbook)
3. Update and format a spreadsheet.
4. Move data within and between spreadsheets.
5. Insert formulas in a spreadsheet.
6. Create charts using data from a spreadsheet.

Terminology

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|--------------|--------------------------|
| 1. Alignment | 12. Functions |
| 2. AutoFill | 13. Gridlines |
| 3. AutoSum | 14. Insert |
| 4. Borders | 15. Mixed cell reference |
| 5. Cell | 16. Rows |
| 6. Charts | 17. Spreadsheet |
| 7. Columns | 18. Templates |
| 8. Delete | 19. Windows |
| 9. Filename | 20. Workbook |
| 10. Format | 21. Worksheet |
| 11. Formulas | |

References

1. Hogan, L., (2013). Practical Computing, (3rd Ed.) Upper Saddle River, NJ: Pearson/Prentice Hall.
2. Blesi, M., Wise, B.A., & Kelley-Arney, C, (2012) Medical Assisting Administrative and Clinical Competencies (7th Ed.) Clifton Park, NY: Delmar, Cengage Learning.
3. Proctor, D. B., & Young-Adams, A. P. (2011). Kinn's The Medical Assistant: An Applied Learning Approach (11th Ed.). Philadelphia, PA: Saunders Elsevier.
4. D. Beskeen, (2013). [Microsoft® Office 2013: Illustrated Introductory, First Course, \(1st Ed.\)](#) Cengage Learning.

Content Outline/Theory Objectives	Suggested Learning Activities
<p>Objective 1 Spell and define key terms.</p> <ul style="list-style-type: none"> A. Review the terms listed in the terminology section. B. Spell the listed terms accurately. C. Pronounce the terms correctly. D. Use the terms in their proper context. 	<ul style="list-style-type: none"> A. Games: word searches, crossword puzzles, Family Feud, Jeopardy, bingo, spelling bee, hangman and concentration. B. Administer vocabulary pre-test and post-test. C. Discuss learning gaps and plan for applying vocabulary.
<p>Objective 2 Prepare and format a spreadsheet. (Note that a spreadsheet is also called a worksheet and multiple worksheets are a workbook)</p> <ul style="list-style-type: none"> A. Create a spreadsheet <ul style="list-style-type: none"> 1. Enter data in a cell. 2. Edit data in a cell. B. Save a spreadsheet. C. Open a spreadsheet. D. Print a spreadsheet. E. Close a spreadsheet. F. Apply character formatting with the formatting tool bar <ul style="list-style-type: none"> 1. Bold. 2. Italic. 3. Underline. 4. Font size. 5. Font color. G. Change column width and height <ul style="list-style-type: none"> 1. Change column width. 2. Change column height. H. Format data in cells <ul style="list-style-type: none"> 1. Format numbers. 2. Change data alignment in cells. I. Format cells <ul style="list-style-type: none"> 1. Add borders to cells. 2. Add shading and a pattern to cells. 3. Format with Auto Format. 	<ul style="list-style-type: none"> A. Lecture/Discussion B. Assigned Readings C. Use computer assisted learning/workbook activities.
<p>Objective 3 Update and format a spreadsheet.</p> <ul style="list-style-type: none"> A. Insert or delete rows and columns <ul style="list-style-type: none"> 1. Insert rows. 2. Insert columns. 3. Delete rows, columns or cells. B. Format a spreadsheet page <ul style="list-style-type: none"> 1. Control the page layout. 2. Change spreadsheet margins. 	<ul style="list-style-type: none"> A. Lecture/Discussion B. Assigned Readings C. Use computer assisted learning/workbook activities. D. Schedule time in a computer lab for students to practice. E. Have the students form small

<ol style="list-style-type: none"> 3. Center a spreadsheet horizontally and vertically. 4. Insert page breaks. 5. Print column and row titles on multiple pages. 6. Print gridlines and row and column headings. 	<p>groups consisting of two or three students; ask them to create a scenario where a spreadsheet would assist in data management. Ask them to create a basic spreadsheet related to the scenario that can be used in later lessons. Save to CD or flash drive.</p> <p>F. Ask each group to present their results for group discussions and spreadsheet application.</p>
<p>Objective 4 Move data within and between spreadsheets.</p> <ol style="list-style-type: none"> A. Move, copy and paste cells <ol style="list-style-type: none"> 1. Move selected cells. 2. Copy selected cells. B. Create a workbook with multiple spreadsheets <ol style="list-style-type: none"> 1. Print a workbook containing several spreadsheets. 2. Delete a spreadsheet. 3. Split a spreadsheet into windows and freeze panes. C. Work with Windows <ol style="list-style-type: none"> 1. Open multiple workbooks. 2. Close multiple workbooks. 3. Arrange workbooks. D. Use excel templates <ol style="list-style-type: none"> 1. Enter data in a template. 2. Customize a template. 	<ol style="list-style-type: none"> A. Lecture/Discussion B. Assigned Readings C. Use computer assisted learning/ workbook activities. D. Schedule time in a computer lab for students to practice. E. Ask students to add data in at least two workbooks to the spreadsheet created in the last lesson. F. Visit an office setting that uses a computer for administrative tasks. G. Have the students practice obtaining information using a spreadsheet and performing other administrative tasks.
<p>Objective 5 Insert formulas in a spreadsheet.</p> <ol style="list-style-type: none"> A. Use the AutoSum button. B. Write formulas with mathematical operators <ol style="list-style-type: none"> 1. Copy a formula. 2. Copy formulas with AutoFill. C. Insert a formula with the function wizard or assistant <ol style="list-style-type: none"> 1. Find averages. 2. Find maximum and minimum values. 3. Find depreciation values. 	<ol style="list-style-type: none"> A. Lecture/Discussion B. Assigned Readings C. Use computer assisted learning/workbook activities. D. Schedule time in a computer lab for students to practice. E. Have students insert formulas into spreadsheets. F. Engage the students in a discussion about the advantages and disadvantages of various computer accounting systems.

Objective 6**Create charts using data from a spreadsheet.**

- A. Create a chart in excel with data in a spreadsheet
 - 1. Size the chart.
 - 2. Move the chart.
- B. Change the chart type.
- C. Change the data in the cells.
- D. Add and delete elements on the chart
 - 1. Add titles.
 - 2. Add data labels.
 - 3. Delete and remove chart elements.
 - 4. Add gridlines.

- A. Lecture/Discussion
- B. Assigned Readings
- C. Use computer assisted learning/workbook activities.
- D. Schedule time in a computer lab for students to practice.
- E. Have the students create charting examples using bar, pie and column graphs.
- F. Have the students form small groups consisting of two or three students. Instruct the students to select a problem and develop a program to solve the problem.
- G. Students should be encouraged to develop graphics or charts depicting their results.