K-14 Scope and Sequence
Keyboarding and Computer Applications

Description	K-2	3-5	6-8	9-10	11-12	13-14
1. Basic Operations and Concepts						
1.1. Employ appropriate startup and shut down procedures, including standby, restart, and hibernate	AI	IR	R	M	M	M
1.2. Use correct keying technique	AI	IR	M	M	M	M
1.2.1. Use the home row and correct reaches	AI	IR	R	M	M	M
1.2.2. Use enter/return, space bar, shift, and tab keys with correct reaches	AI	IR	R	M	M	M
1.2.3. Use correct posture at the computer	AI	IR	R	M	M	M
1.2.3.1. Sit up straight, square, and centered to the keyboard	AI	RM	M	M	M	M
1.2.3.2. Place feet flat on the floor	AI	RM	M	M	M	M
1.2.3.3. Use proper chair height	AI	RM	M	M	M	M
1.2.3.4. Use proper distance from the keyboard	AI	RM	M	M	M	M
1.2.3.5. Place hands slightly off of the keyboard with wrists flat	AI	RM	M	M	M	M
1.2.3.6. Keep elbows close to your sides	AI	RM	M	M	M	M
1.2.3.7. Keep fingers slightly curved	AI	RM	M	M	M	M
1.2.4. Use the top row of the keyboard for number keying	A	IR	R	M	M	M
1.2.5. Use the numeric keypad for number keying	A	IR	R	M	M	M
1.2.6. Keep eyes on copy	A	IR	M	M	M	M
1.2.7. Key rhythmically	A	IR	R	M	M	M
1.3. Use mouse correctly	AI	R	M	M	M	M
1.3.1. Use the point and click feature	AI	R	M	M	M	M
1.3.2. Use the double click feature	AI	IR	RM	M	M	M
1.3.3. Use the drag and drop feature	AI	R	M	M	M	M
1.3.4. Use the right click feature	AI	IR	RM	M	M	M
1.3.5. Recognize mouse icons (i.e., I-beam, arrow, double-headed arrow, four-headed arrow, hour glass, pointing index finger)	A	IR	RM	M	M	M
1.3.6. Change mouse characteristics (i.e., buttons, motion, orientation, pointers)	A	IR	RM	M	M	M
1.4. Practice proper care with all computer components	AI	R	M	M	M	M
1.4.1. Exhibit good hygiene when operating the computer	AI	R	M	M	M	M
1.4.2. Keep food, liquid, and magnets away from computer components	AI	R	M	M	M	M

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K-14 Scope and Sequence
Keyboarding and Computer Applications

Description	K-2	3-5	6-8	9-10	11-12	13-14
1.4.3. Use and properly care for storage media (i.e., CD-ROMs, USB flash drives)	AI	R	M	M	M	M
1.5. Use and identify operating system functions	AI	IR	M	M	M	M
1.5.1. Open and exit applications using various methods	AI	IR	M	M	M	M
1.5.2. Open, close, minimize, maximize, and restore windows	AI	IR	M	M	M	M
1.5.3. Perform tasks using menus, buttons, and keyboard shortcuts	AI	IR	R	M	M	M
1.5.4. Display and use toolbars	AI	IR	R	M	M	M
1.5.5. Identify and use vertical and horizontal scroll bars	AI	IR	M	M	M	M
1.5.6. Identify and refer to parts of the window	AI	R	M	M	M	M
1.5.7. Cascade and tile windows	AI	IR	R	M	M	M
1.5.8. Demonstrate effective file management skills	AI	IR	R	RM	M	M
1.5.8.1. Create and name files	AI	IR	RM	M	M	M
1.5.8.2. Open and close files	AI	IR	M	M	M	M
1.5.8.3. Use the Save and Save As commands appropriately	AI	IR	M	M	M	M
1.5.8.4. Find or search for files and folders	A	I	R	RM	M	M
1.5.8.5. Create and name folders	*	A	IR	RM	M	M
1.5.8.6. Sort folders by type, name, date, size, or program	*	*	AI	R	RM	M
1.5.8.7. Change folder views	*	*	AI	R	RM	M
1.6. Setup and prepare the workstation	A	AI	R	M	M	M
1.7. Explain computer processes (i.e., input, process, output, storage)	*	A	IR	R	M	M
1.8. Identify basic hardware devices						
1.8.1. Identify storage devices (i.e., hard drive, USB flash drive, CD drive, DVD drive)	A	AI	R	M	M	M
1.8.1.1. Compare and contrast types of storage devices	*	AI	R	M	M	M
1.8.2. Identify input devices (i.e., mouse, keyboard, stylus, handheld computers, scanner, digital camera, microphone, smart phones)	A	AI	R	M	M	M
1.8.3. Identify output devices (i.e., printer, monitor, speakers)	A	AI	R	M	M	M
1.8.4. Identify central processing unit	A	AI	R	M	M	M
1.8.5. Identify communication devices (i.e., modem)	*	A	I	R	M	M
1.9. Use basic hardware	A	AI	R	M	M	M

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K-14 Scope and Sequence
Keyboarding and Computer Applications

Description	K-2	3-5	6-8	9-10	11-12	13-14
1.9.1. Use storage devices (i.e., hard drive, USB flash drive, CD drive, DVD drive)	A	AI	R	M	M	M
1.9.2. Use output devices (i.e., printer, monitor, speakers)	A	AI	R	M	M	M
1.9.3. Use communication devices (i.e., modem)	A	AI	R	M	M	M
1.10. Choose an appropriate device for a given task (i.e., input, output, storage)	*	AI	I	R	M	M
1.11. Multitask by opening and using two or more applications at once	*	AI	R	M	M	M
1.12. Identify different file extensions (i.e., .doc, .xls)	*	AI	RM	M	M	M
1.13. Recognize desktop icons and their functions	*	AI	R	M	M	M
1.14. Use the help and support features	*	AI	IR	M	M	M
1.15. Differentiate between system and application software programs	*	A	IR	R	M	M
1.15.1. Apply Control Panel options to setup/alter peripherals	*	A	IR	R	M	M
1.15.2. Identify the information available in the system properties dialog box	*	A	I	R	M	M
1.15.3. Cascade and tile windows	*	A	I	R	M	M
1.15.4. Edit desktop properties	*	A	I	R	M	M
1.15.5. Interpret notification area messages	*	*	I	R	M	M

K-14 Scope and Sequence
Keyboarding and Computer Applications

Description	K-2	3-5	6-8	9-10	11-12	13-14
2. Social, Ethical, and Human Issues						
2.1. Work cooperatively with others as a team	AI	IR	R	RM	M	M
2.2. Demonstrate ethical behavior when using computers	AI	I	IR	R	RM	M
2.2.1. Define plagiarism	AI	I	IR	R	RM	RM
2.2.2. Define copyright	AI	I	IR	R	RM	RM
2.2.3. Obey copyright laws	A	IR	IR	R	RM	M
2.2.4. Respect privacy of others	A	AI	I	IR	RM	M
2.2.5. Identify issues that are harmful to information technology (i.e., virus, cookies)	A	AI	I	IR	RM	M
2.2.6. Describe personal consequences of copyright violations	*	AI	R	RM	M	M
2.3. Follow district Acceptable Use Policy	AI	R	M	M	M	M
2.3.1. Abide by classroom policies and procedures relating to technology	AI	R	M	M	M	M
2.4. Advocate for legal and ethical behaviors regarding the use of technology and information	AI	R	R	M	M	M
2.5. Protect personal information	A	AI	I	IR	RM	M
2.6. Discuss health and ergonomic issues related to the use of technology	*	A	I	R	RM	M

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K-14 Scope and Sequence
Keyboarding and Computer Applications

Description	K-2	3-5	6-8	9-10	11-12	13-14
3. Technology Productivity Tools						
Keyboarding *(See *Section 1 - Basic Operations and Concepts* for details on proper keying technique)	**AI**	**R**	**M**	**M**	**M**	**M**
3.1. Compose original documents at the keyboard	AI	IR	RM	M	M	M
3.2. Identify the insertion point	AI	R	M	M	M	M
3.3. Key at a predetermined level of accuracy	A	I	RM	M	M	M
3.4. Use and interpret proofreader's marks	A	I	IR	RM	M	M
3.5. Zoom a document	*	AI	IR	RM	M	M
3.6. Perform touch keying of words, phrases, sentences, and paragraphs using correct reaches	*	AI	RM	M	M	M
3.7. Key at a predetermined level of speed	*	A	IR	RM	M	M
3.8. Use keyboard shortcuts (i.e., Ctrl+Home, Ctrl+End, Page Up, Page Down)	AI	R	R	M	M	M
Word Processing	**A**	**I**	**M**	**M**	**M**	**M**
3.9. Describe how word processing programs assist in the presentation of ideas and facts to an audience	A	AI	R	RM	M	M
3.10. Open, modify, and save an existing document	A	IR	R	RM	M	M
3.11. Switch between views	*	AI	I	RM	M	M
Format and Edit Text						
3.12. Define word wrap	AI	IR	M	M	M	M
3.13. Select, insert, and delete text	AI	R	M	M	M	M
3.14. Move and copy text	AI	IR	RM	M	M	M
3.15. Change font face (typeface), size, and color	AI	R	RM	M	M	M
3.16. Use bold, italic, and underline styles	AI	R	RM	M	M	M
3.17. Change page setup options	A	I	R	M	M	M
3.17.1. Set page orientation (i.e., portrait, landscape)	AI	I	R	RM	M	M
3.17.2. Set horizontal and vertical text alignment	AI	IR	RM	M	M	M
3.17.3. Set document margins	A	I	R	M	M	M
3.17.4. Change document default settings	*	AI	IR	RM	M	M
3.17.5. Change paper size and print source	*	A	IR	RM	M	M
3.18. Insert and format text boxes	*	AI	R	RM	M	M
3.19. Create, insert, size, move, format, and link charts	*	AI	IR	RM	M	M
3.20. Change font case	*	AI	R	M	M	M

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3.21. Set line spacing	*	AI	R	M	M	M
3.22. Create and customize bulleted or numbered lists	*	AI	IR	RM	M	M
3.23. Apply and edit borders and shading options	*	AI	IR	RM	M	M
3.24. Use format painter	*	A	I	R	M	M
3.25. Apply special font effects	*	A	I	R	M	M
3.26. Reveal formatting	*	A	I	RM	M	M
3.27. Insert a hard return, soft return, and hard page break	*	A	I	R	M	M
3.28. Apply highlight feature to text	*	A	I	R	M	M
3.29. Set and edit spacing before and after paragraphs	*	*	IR	RM	M	M
3.30. Set, edit, and clear indents on the ruler or using menu options	*	*	AI	R	RM	M
3.31. Set, edit, and clear tabs on the ruler or using menu options	*	*	AI	IR	RM	M
3.32. Insert and format sections	*	*	AI	IR	RM	M
3.33. Find and replace characters and formatting	*	*	AI	IR	M	M
3.34. Insert and format page numbers (i.e., different first page)	*	*	AI	IR	RM	M
3.35. Apply, create, modify, and clear styles for characters and paragraphs	*	*	A	I	RM	M
3.36. Adjust character spacing	*	*	A	I	RM	M
3.37. Save a document in appropriate formats for different usages (i.e., RTF, webpage, XML, template)	*	*	*	IR	RM	M
3.38. Insert and view hidden text	*	*	*	AI	IR	M
3.39. Structure documents using Extensible Markup Language (XML)	*	*	*	*	AI	IR
Tools						
3.40. Use undo/redo actions	AI	IR	RM	M	M	M
3.41. Explain the difference between insert mode and typeover mode	A	IR	RM	M	M	M
3.42. Store frequently used text	A	I	R	M	M	M
3.43. Explain the function of the clipboard	*	AI	IR	RM	M	M
3.44. Insert symbols and special characters	*	AI	IR	RM	M	M
3.45. Use proofing tools (i.e., spell check, grammar check, word count, comments, document summarization, document statistics)	*	AI	R	M	M	M
3.45.1. Create a custom dictionary and change the default dictionary	*	A	I	RM	M	M

3.46. Customize toolbars and menus	*	A	I	RM	M	M
3.47. Store text for automatic correction	*	*	AI	R	M	M
3.48. Use the Paste Special dialog box	*	*	AI	IR	RM	M
3.49. Insert date codes and time codes	*	*	AI	IR	RM	M
3.50. Create and modify footnotes and endnotes to cite sources	*	*	AI	IR	RM	M
3.51. Import, embed, and link a spreadsheet worksheet in a file	*	*	AI	R	RM	M
3.52. Use research services	*	*	AI	IR	RM	M
3.53. Insert, format, edit, delete, and position headers/footers (include different first page, odd/even pages, page numbering)	*	*	AI	IR	RM	M
3.54. Create, edit, delete, format, size, and move tables	*	*	AI	IR	RM	M
3.54.1. Insert and delete rows and columns; split and merge cells	*	*	AI	IR	RM	M
3.54.2. Add borders and shading to cells	*	*	AI	IR	RM	M
3.54.3. Apply auto formats to a table	*	*	AI	IR	RM	M
3.54.4. Sort text in tables	*	*	AI	IR	RM	M
3.54.5. Change text direction	*	*	AI	IR	RM	M
3.54.6. Modify table formats and properties	*	*	AI	IR	RM	M
3.54.7. Perform calculations in tables	*	*	AI	IR	RM	M
3.54.8. Convert text to table and table to text	*	*	*	IR	RM	RM
3.55. Format text into columns	*	*	AI	IR	RM	M
3.55.1. Edit column size and spacing	*	*	AI	IR	RM	M
3.56. Insert and modify hyperlinks within a document	*	*	A	AI	R	M
3.57. Create and use templates	*	*	A	I	RM	M
3.58. Sort information alphabetically or by other means	*	*	A	I	R	M
3.59. Create and use forms	*	*	*	AI	RM	M
3.60. Create and use macros	*	*	*	AI	IR	RM
3.61. Protect documents	*	*	*	AI	RM	M
3.62. View document properties	*	*	*	*	AI	RM
3.63. Attach digital signatures to documents	*	*	*	*	A	IR
Graphics						
3.64. Insert clip art and pictures from various sources	AI	IR	RM	M	M	M
3.64.1. Manipulate clip art and pictures (i.e., washout, grayscale, black/white, resize, rotate, change size, change color, move)	*	AI	IR	RM	M	M
3.65. Create a word/text art object	AI	R	RM	M	M	M

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3.66. Draw, size, format, and move shapes and lines	A	AI	IR	RM	M	M
3.67. Flip, rotate, and crop objects	*	AI	IR	RM	M	M
3.68. Wrap text around clip art, pictures, and text art	*	AI	IR	RM	M	M
3.69. Explain the differences between picture file types (i.e., jpeg, gif, tiff)	*	AI	IR	RM	M	M
3.70. Control image brightness and contrast	*	*	I	RM	M	M
Create Documents						
3.71. Create correspondence	*	AI	IR	RM	M	M
3.72. Create reports (i.e., single page, multi-paragraph, multi-page)	*	AI	IR	RM	M	M
3.73. Create reference information (i.e., table of contents, index)	*	*	AI	IR	R	RM
3.74. Create and format web pages	*	*	AI	IR	RM	M
3.75. Create special documents (i.e., resume, minutes, itinerary, agenda)	*	*	AI	IR	M	M
3.75.1. Create infographics (i.e., newsletters, flyers, handouts)	*	*	AI	RM	M	M
3.75.2. Create envelopes and labels	*	*	AI	IR	M	M
3.75.3. Create and modify organizational charts and diagrams	*	*	*	AI	IR	RM
3.75.4. Create documents using mail merge	*	*	*	AI	R	M
3.75.5. Create master documents and sub-documents	*	*	*	*	*	AI
3.76. Print a document	AI	R	RM	M	M	M
Use Collaboration/Integration Tools	*	*	AI	IR	RM	M
3.77. Insert, view, and edit comments	*	*	A	IR	RM	M
3.78. Track, accept, and reject proposed changes	*	*	A	IR	RM	M
3.78.1. Modify track changes options	*	*	*	AI	RM	M
3.78.2. Print document with markup	*	*	*	AI	RM	M
3.79. Circulate documents for review	*	*	*	AIR	RM	M
3.80. Compare and merge document versions	*	*	*	AIR	RM	M
3.80.1. Manage document versions	*	*	*	AIR	RM	M
Presentation and Multimedia	**A**	**AI**	**R**	**RM**	**M**	**M**
3.81. Describe how slide shows assist in the presentation of ideas and facts to an audience	A	AI	R	RM	M	M
3.82. Organize a presentation plan	*	A	I	R	RM	M
Work with Presentations						
3.83. Create a slide show	AI	IR	R	M	M	M
3.83.1. Use a design template	AI	IR	R	RM	M	M

3.83.2. Insert automatic slide content	*	*	A	IR	RM	M
3.84. Insert slides using different slide layouts	AI	IR	R	M	M	M
3.85. Open, modify, and save an existing presentation	AI	IR	R	M	M	M
3.86. Switch between slide views	A	IR	R	M	M	M
Format and Edit						
3.87. Move and copy slide objects	AI	IR	RM	M	M	M
3.88. Revise the sequence of slides	A	IR	R	M	M	M
3.89. Change the slide background	AI	I	R	RM	M	M
3.90. Change the slide layout	A	AI	IR	RM	M	M
3.91. Apply transitions and timings	*	AI	IR	RM	M	M
3.92. Insert slides from file	*	AI	IR	RM	M	M
3.93. Apply animation to text and create custom animations	*	AI	IR	RM	M	M
3.94. Change the slide design color scheme	*	*	AI	IR	RM	M
3.95. Insert and modify hyperlinks within a presentation	*	*	A	AI	R	M
3.96. Work with slide masters	*	*	*	IR	RM	M
3.97. Insert headers and footers	*	*	*	AI	RM	M
Graphics, Audio, and Video						
3.98. Use the drawing tools	A	AI	IR	RM	M	M
3.99. Manipulate clip art, drawing objects, and pictures	*	AI	IR	RM	M	M
3.100. Work with gridlines and page guides	*	AI	IR	RM	M	M
3.101. Insert audio and video clips	*	AI	IR	RM	M	M
3.102. Apply animation to graphics and create custom animations	*	AI	IR	RM	M	M
3.103. Insert diagrams and graphs	*	*	*	AI	IR	RM
Presentation Delivery						
3.104. Run a slide show	AI	IR	R	M	M	M
3.105. Preview and print slides and audience handouts	AI	IR	R	M	M	M
3.106. Deliver an oral presentation with a slideshow	A	AI	IR	RM	M	M
3.107. Develop a presentation with sources cited	*	AI	IR	RM	M	M
3.108. Critique presentations	*	AI	IR	RM	M	M
3.109. Save a presentation as a web page	*	A	AI	IR	RM	M
Spreadsheets	**A**	**IR**	**R**	**RM**	**M**	**M**
3.110. Describe how worksheets are used to analyze data and solve problems	*	AI	IR	RM	M	M
Work with Spreadsheets						
3.111. Open, modify, and save an existing spreadsheet	A	IR	R	RM	M	M

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3.112. Identify cells, columns, rows, and ranges	A	IR	R	RM	M	M
3.113. Insert and delete data in cells	A	IR	R	RM	M	M
3.114. Select cells, columns, rows, ranges, and the entire worksheet	A	IR	R	RM	M	M
3.115. Insert and delete cells, columns, and rows	A	IR	R	RM	M	M
3.116. Interpret spreadsheet data	A	IR	R	RM	M	M
3.117. Select the appropriate chart type to best represent given data	A	I	R	RM	M	M
3.118. Delete, add, copy, cut, paste, and rename worksheets	*	AI	IR	RM	M	M
3.119. Use cut, copy, paste, and paste special to manipulate spreadsheet data	*	AI	IR	RM	M	M
3.120. Insert, position, and size graphics	*	AI	IR	RM	M	M
3.121. Zoom a spreadsheet	*	AI	IR	RM	M	M
3.122. Hide and unhide columns and rows	*	AI	IR	RM	M	M
3.123. Create spreadsheets from templates	*	AI	IR	RM	M	M
3.124. Create formulas	*	AI	IR	RM	M	M
3.124.1. Use function formulas (i.e., mathematical, financial, statistical, logical)	*	AI	IR	RM	M	M
3.124.2. Use relative, absolute, and mixed cell references in formulas	*	*	AI	IR	RM	M
3.124.3. Trace formula precedents, dependents, and errors	*	*	AI	R	RM	M
3.124.4. Add subtotals to worksheet data	*	*	*	A	IR	RM
3.124.5. Watch and evaluate formulas	*	*	*	*	*	IR
3.125. Preview and print spreadsheets	*	AI	R	RM	M	M
3.125.1. Size to fit	*	*	A	IR	RM	M
3.125.2. Set print area to print a specified area of a worksheet	*	*	A	IR	RM	M
3.125.3. Print a workbook containing multiple worksheets	*	*	AI	IR	RM	M
3.125.4. Print column and row titles on multiple pages	*	*	AI	IR	RM	M
3.125.5. Print gridlines and column headings	*	*	AI	IR	RM	M
3.125.6. Print formulas	*	*	AI	IR	RM	M
3.125.7. Adjust alignment to center a worksheet horizontally and vertically	*	*	A	IR	RM	M
3.126. Copy and move a worksheet to another spreadsheet	*	A	IR	RM	M	M
3.127. Present spreadsheet data orally to a group	*	A	IR	RM	M	M
3.128. Save spreadsheets in a variety of formats (i.e., template, webpage, XML)	*	*	A	IR	RM	M

3.129. Split a worksheet into windows and freeze and unfreeze panes	*	*	A	I	RM	M
3.130. Consolidate data from two or more worksheets	*	*	A	IR	RM	M
3.131. Import data into a spreadsheet	*	*	A	IR	RM	M
3.131.1. Link spreadsheet data	*	*	A	IR	RM	M
3.131.2. Embed objects in spreadsheets	*	*	A	IR	RM	M
3.132. Export spreadsheet data	*	*	A	IR	RM	M
3.133. Create and edit templates	*	*	A	IR	RM	M
3.134. Insert and modify hyperlinks within a spreadsheet	*	*	*	AI	IR	M
Format a Spreadsheet						
3.135. Change fonts and apply font styles	A	IR	RM	M	M	M
3.136. Center cell contents across a range	A	IR	RM	M	M	M
3.137. Align text horizontally in cells	A	IR	RM	M	M	M
3.138. Align text vertically in cells	*	AI	IR	RM	M	M
3.139. Change column width	A	IR	RM	M	M	M
3.140. Change row height	A	IR	RM	M	M	M
3.141. Change page orientation	A	I	R	RM	M	M
3.142. Set margins	A	I	R	M	M	M
3.143. Change number formats	A	AI	IR	RM	M	M
3.144. Add borders and shading to cells	*	AI	IR	RM	M	M
3.145. Customize worksheet tabs	*	AI	IR	RM	M	M
3.146. Align, indent, and rotate cell contents	*	*	AI	RM	M	M
3.147. Apply and modify cell styles	*	*	AI	RM	M	M
3.148. Arrange worksheets	*	*	A	I	RM	M
3.149. Format multiple worksheets in one spreadsheet simultaneously	*	*	A	IR	RM	M
3.150. Add a background image to a worksheet	*	*	*	AI	RM	M
3.151. Use conditional formatting	*	*	*	AI	RM	M
Tools						
3.152. Use undo/redo commands	AI	IR	RM	M	M	M
3.153. Check spelling	AI	IR	RM	M	M	M
3.154. Use automatic content tools	*	AI	IR	RM	M	M
3.155. Insert headers and footers	*	AI	R	RM	M	M
3.156. Create, modify, and position charts based on worksheet data	*	AI	IR	RM	M	M
3.157. Sort data	*	AI	IR	RM	M	M

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3.158. Perform what-if analyses	*	A	IR	RM	M	M
3.159. Add and remove buttons from the toolbar	*	*	AI	IR	RM	M
3.160. Search for and replace text	*	*	AI	IR	RM	M
3.161. Name a range and use a range in a formula	*	*	AI	IR	RM	M
3.162. Filter data	*	*	AI	IR	RM	M
3.162.1. Create and apply advanced filters	*	*	*	*	I	RM
3.163. Group and outline data	*	*	*	A	IR	RM
3.164. Add data validation criteria to cells	*	*	*	A	IR	RM
3.165. Customize toolbars and menus	*	*	*	A	IR	RM
3.166. Create macros	*	*	*	A	IR	RM
3.167. Aggregate and group data into reports and charts	*	*	*	*	AI	RM
3.168. Structure workbooks using XML	*	*	*	*	A	IR
3.169. Project values using analysis tools	*	*	*	*	A	IR
3.170. Use digital signatures to authenticate workbooks	*	*	*	*	A	IR
Use Collaboration/Integration Tools						
3.171. Insert, view, and edit comments	*	*	*	AI	IR	RM
3.172. Add protection for cells, worksheets, and workbooks	*	*	*	AI	IR	RM
3.173. Create and modify shared workbooks	*	*	*	A	IR	RM
3.173.1. Edit macros using the Visual Basic Editor	*	*	*	A	IR	RM
3.173.2. Set macro settings	*	*	*	A	IR	RM
3.174. Set passwords	*	*	*	*	AI	RM
3.175. Merge multiple versions of the same workbook	*	*	*	*	A	IR
3.176. Track, accept, and reject proposed changes	*	*	*	*	A	IR
3.176.1. Accept and reject changes	*	*	*	*	A	IR
Database	*****	*****	**AI**	**IR**	**RM**	**M**
3.177. Describe the purpose of a database (relative to other types of software/documents)	*	*	AI	IR	RM	M
3.178. Explain how a database is used to store, manipulate, and report data	*	*	AI	IR	RM	M
3.179. Open, modify, and save an existing database						
Work with Databases						
3.180. Create a new database	*	*	AI	IR	RM	M
3.181. Open and edit an existing database	*	*	AI	IR	RM	M
3.182. Navigate between two database objects	*	*	AI	IR	RM	M
3.183. Use tables (i.e., review, summarize information)	*	*	AI	IR	RM	M

3.183.1. Create a table (i.e., wizard, design view, template)	*	*	AI	IR	RM	M
3.183.2. Define the primary key and apply to a table	*	*	AI	IR	RM	M
3.183.3. Modify a table in the design view	*	*	AI	IR	RM	M
3.183.4. Modify a table in the database view	*	*	AI	IR	RM	M
3.183.5. Insert, modify, and delete data, fields, and records	*	*	AI	IR	RM	M
3.183.6. Preview and print a datasheet	*	*	AI	IR	RM	M
3.183.7. Switch between datasheet and design view	*	*	AI	IR	RM	M
3.183.8. Insert, modify, and delete a field in design view	*	*	AI	IR	RM	M
3.183.9. Find and replace data	*	*	AI	IR	RM	M
3.183.10. Sort records in a table	*	*	AI	IR	RM	M
3.183.11. Filter by selection	*	*	A	IR	RM	M
3.183.12. Filter by form	*	*	A	IR	RM	M
3.183.13. Create and apply an advanced filter	*	*	A	IR	RM	M
3.183.14. Create and modify Lookup fields in a table	*	*	*	A	IR	RM
3.183.15. Create and modify an input mask for a field	*	*	*	A	IR	RM
3.183.16. Create sub-tables	*	*	*	A	IR	RM
3.184. Use queries	*	*	AI	IR	RM	M
3.184.1. Create a query (i.e., wizard, design view, auto report)	*	*	AI	IR	RM	M
3.184.2. Sort fields in a query	*	*	A	IR	RM	M
3.184.3. Refine a query using the filter options	*	*	A	IR	RM	M
3.184.4. Create advanced queries (i.e., totals, compound criteria, calculated, update, crosstab)	*	*	*	A	IR	RM
3.184.5. Modify the properties of fields used in queries	*	*	*	A	IR	RM
3.184.6. Run a query	*	*	AI	IR	RM	M
3.185. Use forms	*	*	AI	IR	R	RM
3.185.1. Create and format a form (i.e., autoform, wizard)	*	*	AI	IR	R	RM
3.185.2. Create and format a form in design view	*	*	AI	IR	R	RM
3.185.3. Enter data using a form	*	*	AI	IR	RM	M
3.185.4. Use error checking in forms	*	*	*	A	IR	RM
3.185.5. Modify form properties (i.e., control objects, footer, header, graphics)	*	*	*	A	IR	RM
3.185.6. Create and modify sub-forms	*	*	*	A	IR	RM
3.185.7. Insert calculated fields in a form	*	*	*	A	IR	M
3.186. Use reports	*	*	AI	IR	R	RM
3.186.1. Create and modify a report (i.e., wizard, auto report)	*	*	AI	IR	R	RM

3.186.2. Create and modify a report in design view	*	*	AI	IR	R	RM
3.186.3. Preview and print a report	*	*	AI	IR	RM	M
3.186.4. Sort records in a report	*	*	A	IR	RM	M
3.186.5. Create a report with related database tables	*	*	*	A	IR	RM
3.186.6. Use error checking in reports	*	*	*	A	IR	RM
3.186.7. Add and modify report control properties (i.e., control objects, footer, header, graphics)	*	*	*	A	IR	RM
3.186.8. Calculate subtotals, totals, or averages in a report	*	*	*	A	IR	RM
3.186.9. Utilize grouping and sub-grouping	*	*	*	A	IR	RM
3.186.10. Embed a sub-report in a main report	*	*	*	A	IR	RM
3.187. Create table relationships (i.e., join types, one-to-many, many-to-many)	*	*	*	AI	R	M
3.188. Print table relationships	*	*	*	AI	R	M
Tools						
3.189. Set relationship properties	*	*	*	A	IR	M
3.190. Create and edit single-field and multiple-field indexes	*	*	*	A	IR	M
3.191. Use database utilities (i.e., back up, compact, repair)	*	*	*	A	IR	M
3.192. Employ security measures (i.e., set passwords, add permission, encode/decode)	*	*	*	A	IR	M
3.193. Set startup options	*	*	*	A	IR	M
3.194. Replicate a database	*	*	*	A	IR	M
3.195. Create a command button	*	*	*	A	IR	M
3.196. Portray database information in a chart	*	*	*	A	IR	M
3.197. Create and modify a data access page	*	*	*	A	AI	RM
3.198. Group and sort a data access page	*	*	*	A	AI	RM
3.199. Use pivot tables	*	*	*	*	AI	RM
3.200. Create and edit a macro	*	*	*	*	A	IR
Use Collaboration/Integration Tools						
3.201. Use database information for mail merge documents	*	*	*	A	IR	M
3.202. Export records in a table to a spreadsheet	*	*	*	A	IR	M
3.203. Link data from a spreadsheet to a table in a database file	*	*	*	A	IR	M
3.204. Use XML to share data (import/export)	*	*	*	*	A	IR

K-14 Scope and Sequence
Keyboarding and Computer Applications

Description	K-2	3-5	6-8	9-10	11-12	13-14
4. Technology Communications Tools						
4.1. Select appropriate technology tools for the task and audience	AI	IR	M	M	M	M
4.2. Identify examples of programs that can harm your computer (i.e., viruses, worms, Trojan Horses, adware and spyware)	AI	IR	M	M	M	M
4.3. Use a web browser	AI	R	M	M	M	M
4.3.1. Explain website extensions (i.e., .org, .com, .edu, .gov)	AI	IR	R	M	M	M
4.3.2. Navigate teacher-approved websites	AI	R	M	M	M	M
4.3.3. Identify navigation bar buttons and their purpose	A	IR	RM	M	M	M
4.3.4. Identify the purpose of search engines	A	IR	R	M	M	M
4.3.5. Create and use Favorites and Bookmarks	A	AI	R	M	M	M
4.3.6. Copy and paste a picture from the Internet	A	AI	R	M	M	M
4.3.7. Define URL	*	AI	R	RM	M	M
4.3.8. Identify a home page	*	AI	IR	RM	M	M
4.3.9. Identify a hyperlink	*	A	I	R	M	M
4.4. Use email	*****	**AI**	**IR**	**RM**	**M**	**M**
4.4.1. Adjust advanced email settings (i.e., font, margins, color, signature block)	*	AI	IR	RM	M	M
4.4.2. Explain the purpose and intent of email	*	AI	I	IR	M	M
4.4.3. Identify the parts of an email message	*	A	AI	IR	RM	M
4.4.4. Send and receive email	*	A	AI	IR	RM	M
4.4.5. Demonstrate proper netiquette	*	A	AI	IR	RM	M
4.4.6. Create an email message from inside an application	*	A	AI	IR	RM	M
4.4.7. Manage email messages	*	*	AI	IR	M	M
4.4.8. Send an email with an attachment	*	*	AI	IR	M	M
4.4.9. Explain Spam	*	*	A	IR	RM	M

A = Aware, I = Introduce, R = Reinforce, M = Master

K-14 Scope and Sequence
Keyboarding and Computer Applications

Description	K-2	3-5	6-8	9-10	11-12	13-14
5. Technology Research Tools						
5.1. Demonstrate correct usage of Internet terminology and vocabulary	AI	I	R	R	M	M
5.2. Discuss the principal uses of the Internet, including its history	AI	I	R	R	M	M
5.3. Identify various electronic research resources and reference tools	A	AI	IR	RM	M	M
5.4. Conduct research using appropriate electronic sources and tools (i.e., CD-ROMS and Internet)						
5.4.1. Appropriately cite sources when using information from the Internet	*	A	IR	RM	M	M
5.5. Conduct a simple search (i.e., keyword, subject)	*	AI	R	M	M	M
5.6. Conduct an advanced and/or limited search	*	AI	R	M	M	M
5.7. Utilize research results	A	AI	I	R	M	M
5.8. Acquire information (i.e., text, audio, graphics)	A	AI	R	M	M	M
5.9. Use web directory links	A	AI	R	M	M	M

Description	K-2	3-5	6-8	9-10	11-12	13-14
6. Technology Problem-Solving and Decision-Making Tools						
6.1. Determine the appropriate software application for a given task	*	A	AI	IR	RM	M
6.2. Use technology to compare, contrast, evaluate, and validate information	*	A	AI	IR	M	M
6.3. Consider the quality, quantity, and relevance of information	*	A	AI	IR	M	M
6.4. Use technology to compile, organize, synthesize, produce, and disseminate information	*	*	AI	IR	RM	M
6.5. Collaborate with others in problem solving and decision making	*	*	AI	R	M	M
6.6. Present, in an oral or written report, the problem, the chosen solution, and the rationale for the related decisions	*	*	AI	R	RM	M
6.7. Troubleshoot basic information technology problems using help screens and reference materials	*	*	A	I	R	M
6.8. Integrate software applications to maximize the potential of available functions	*	*	A	IR	M	M
6.9. Develop criteria to determine the effectiveness of the process used for a given task or problem	*	*	*	AI	R	RM