

**INTEGRATED BUSINESS APPLICATIONS 1**  
**ACTIVITY/COURSE CODE: 5020**

**Microsoft Office 2007, 2010, or 2013 (MOS) Core Certification Preparation Course**

**COURSE DESCRIPTION:** This course is designed to teach students software applications that are necessary to live and work in a technological society. The applications covered include word processing, database, spreadsheet, and presentation. Other content areas may include computer hardware, terminology, and concepts.

**OBJECTIVE:** Given the necessary equipment, supplies, and appropriate software, the student will be able to successfully complete the standards necessary for national credentials.

**Note:**

Refer to the [www.microsoft.com](http://www.microsoft.com) Web site to obtain skills standards for each certification exam.

**COURSE CREDIT:** 1 unit

**RECOMMENDED GRADE LEVELS:** 9–12

**PREREQUISITE:** Keyboarding (Course Code 5100) or successful completion of state keyboarding proficiency exam

**COMPUTERS REQUIRED:** one computer per student  
Microsoft Office Suite 2007, 2010, 2013 or above

**A. SAFETY AND ETHICS**

1. Identify major causes of work-related accidents in offices.
2. Describe the threats to a computer network, methods of avoiding attacks, and options in dealing with virus attacks.
3. Identify potential abuse and unethical uses of computers and networks.
4. Explain the consequences of illegal, social, and unethical uses of information technologies (e.g., piracy; illegal downloading; licensing infringement; inappropriate uses of software, hardware, and mobile devices).
5. Differentiate between freeware, shareware, and public domain software copyrights.
6. Discuss computer crimes, terms of use, and legal issues such as copyright laws, fair use laws, and ethics pertaining to scanned and downloaded clip art images, photographs, documents, video, recorded sounds and music, trademarks, and other elements for use in Web publications.

7. Identify netiquette including the use of e-mail, social networking, blogs, texting, and chatting.
8. Describe ethical and legal practices in business professions such as safeguarding the confidentiality of business-related information.

## **B. EMPLOYABILITY SKILLS**

1. Identify positive work practices (e.g., appropriate dress code for the workplace, personal grooming, punctuality, time management, organization).
2. Demonstrate positive interpersonal skills (e.g., communication, respect, teamwork).

## **C. STUDENT ORGANIZATIONS**

1. Explain how related student organizations are integral parts of career and technology education courses.
2. Explain the goals and objectives of related student organizations.
3. List opportunities available to students through participation in related student organization conferences/competitions, community service, philanthropy, and other activities.
4. Explain how participation in career and technology education student organizations can promote lifelong responsibility for community service and professional development.

## **D. BASIC COMPUTER CONCEPTS**

1. Explain steps in the information processing cycle.
2. Identify and explain the components of a computer system.
3. Categorize software according to function (system and application).
4. Define basic computer terminology (hardware, software, input devices, output devices, storage devices, program, pixel, resolution, binary, RAM, ROM, bit, byte, path, prompt, root directory, subdirectory, and wildcard).
5. Demonstrate both cold and warm boots.
6. Define characteristics of LANs, WANs, MANs, and WIFI.

## **E. INTERNET APPLICATIONS**

1. Explain net addresses.
2. Demonstrate ability to use search engines.
3. Evaluate Web site security and integrity.
4. Use e-mail (if available).
5. Discuss issues surrounding information privacy (e.g., social media).

6. Analyze the pros and cons of Web 2.0 (blogs, wikis, social networking, podcasts, and Google Apps).

## F. WORD

1. Create a document (e.g., business letter, resume, MLA/APA report).
2. Differentiate between Save and Save As (different name, location, or format).
3. Discuss file properties.
4. Locate and open an existing document.
5. Create a folder.
6. Discuss shortcut keys/commands.
7. Use the Undo, Redo, and Repeat commands.
8. Apply font formats (font type, font size, font color, bold, italics, and underline).
9. Clear formatting.
10. Apply character effects (superscript, subscript, strikethrough, small caps, and outline).
11. Highlight text in document.
12. Cut, copy, paste, and paste special using the clipboard/Office Clipboard.
13. Copy formats using the Format Painter.
14. Insert and move text (cut-paste and drag-drop).
15. Use special features (e.g., spelling, thesaurus, grammar, find/replace, GoTo, Word Count).
16. Insert hard (manual) and soft (automatic) page breaks.
17. Insert date and time.
18. Insert bullets, numbering, symbols, and special characters.
19. Create a multi-level list (e.g., table of contents, outlines).
20. Define and use AutoCorrect, AutoFormat, and Quick Parts.
21. Align text in paragraphs (center, left, right, and justified).
22. Set character, line, and paragraph spacing options.
23. Apply borders and shading to paragraphs and pages.
24. Use indentation options (left, right, first line, and hanging).
25. Use tab commands (center, decimal, left, right, and leaders).
26. Use the following views: print preview, normal view, page layout view, zoom view, and Web page preview.
27. Print a document.
28. Insert and modify page numbers.
29. Set page orientation.
30. Set margins.
31. Create and modify headers and footers.
32. Align text vertically.
33. Create and modify columns.
34. Create sections with formatting that differs from other sections.
35. Create envelopes and labels.
36. Apply styles, themes, and page backgrounds.

37. Create a new document using a wizard.
38. Use templates to create a new document.
39. Create and modify hyperlinks (e.g., e-mail, document, Web site).
40. Send a Word document via e-mail (if available).
41. Create, edit, and format tables.
42. Modify table structure (insert/delete rows/columns, change cell formats, merge cells, change height/width, and rotate text).
43. Insert, position, and resize graphics in a document (WordArt, clip art, SmartArt, shapes, images, diagrams, and charts).
44. Insert, position, and resize a text box in a document.
45. Create, format, and revise footnotes, endnotes, references, and captions.
46. Merge documents and data sources (e.g., mail merge).
47. Use and manage comments and changes by inserting, modifying, deleting, tracking, accepting, and rejecting.
48. Combine multiple documents/files into one document.
49. Use the Help feature.
50. Use the Backstage environment (MS Office 2010 users only).

## **G. EXCEL**

1. Create a worksheet/workbook.
2. Differentiate between Save and Save As (different name, location, or format).
3. Discuss file properties.
4. Locate and open an existing worksheet/workbook.
5. Create a folder.
6. Discuss shortcut keys/commands.
7. Define and use the name box.
8. Define and use the formula bar.
9. Enter text, dates, and numbers.
10. Use Undo, Redo, and Repeat commands.
11. Apply font formats (font type, font size, font color, bold, italics, and underline).
12. Apply number formats (currency, percent, increase/decrease decimal place, dates, and comma).
13. Clear or edit cell content and/or format.
14. Apply formatting to cells and worksheets (size rows/columns, alignment, merge/split, indentation, borders/shading, text alignment, hide/unhide, and freeze/unfreeze).
15. Insert and delete selected cells, columns, rows, and ranges.
16. Cut, copy, paste, and paste special using the clipboard/Office Clipboard.
17. Copy formats using the Format Painter.
18. Use special features (spelling, thesaurus, grammar, find/replace, GoTo).
19. Use AutoFill to work with a series.

20. Create and modify hyperlinks.
21. Use templates to create a new workbook.
22. Send a workbook via e-mail (if available).
23. Apply AutoFormat.
24. Define, apply, and remove a style.
25. Use the following views: print preview, normal view, page break view, zoom view, and Web page preview.
26. Print a selection, worksheets, and/or workbooks.
27. Set print titles and options (gridlines, print quality, and row/column headings).
28. Change page orientation and scaling.
29. Set page margins and centering.
30. Insert and remove a page break.
31. Clear a preset print area.
32. Create and modify headers and footers.
33. Move between worksheets in a workbook.
34. Insert, delete, move, copy, and rename worksheets.
35. Link worksheets and consolidate data using 3D References.
36. Enter a range within a formula by dragging.
37. Enter and edit formulas in a cell and/or use the formula bar.
38. Use cell references (absolute, mixed, and relative).
39. Use and modify AutoSum.
40. Use basic functions (AVERAGE, SUM, COUNT, MIN, and MAX).
41. Use date functions (NOW and DATE).
42. Use financial functions (PV, FV, and PMT).
43. Use logical functions (IF).
44. Use chart wizard to create a chart.
45. Modify charts.
46. Preview and print charts.
47. Insert, position, and resize graphics on a worksheet (WordArt, clip art, SmartArt, shapes, images, diagrams, and charts).
48. Create and modify lines and objects.
49. Sort and filter data (e.g., AutoFilter).
50. Use the Help feature.
51. Use the Backstage environment (MS Office 2010 users only).

## **H. POWERPOINT**

1. Create new presentations from blanks and/or templates.
2. Differentiate between Save and Save As (different name, location, or format).
3. Discuss file properties.
4. Locate and open an existing presentation.
5. Create a folder.
6. Discuss shortcut keys/commands.
7. Enter text using normal and outline tabs.
8. Insert and delete slides.

9. Change the sequence of slides using Normal, Outline, and Slide Sorter view(s).
10. Insert, position, and resize graphics in a presentation (WordArt, clip art, SmartArt, shapes, images, diagrams, and charts).
11. Insert, position, and resize text box in a presentation.
12. Navigate among different views (normal, outline, and slide sorter).
13. Change the layout for one or more slides.
14. Apply and modify a theme to all or selected slides.
15. Use special features (spelling, thesaurus, grammar, find/replace, GoTo).
16. Edit text (individual slide and slide Master).
17. Copy slides from one presentation to another.
18. Create and modify headers and footers.
19. Add graphical bullets.
20. Insert hyperlinks.
21. Apply custom animation.
22. Apply slide transitions.
23. Use and manage comments and changes by inserting, modifying, deleting, tracking, accepting, and rejecting.
24. Manage presentations (e.g., set up and customize slide show with rehearsed timings, hidden slides, sound files, use screen navigation tools, pen, highlighter, etc.).
25. Discuss publishing a presentation.
26. Send a presentation via e-mail (if available).
27. Prepare to deliver presentations (e.g., print slides, outlines, handouts, and speaker notes, including pure black and white, grayscale, and color).
28. Use the Backstage environment (MS Office 2010 users only).
29. Use the Help feature.

## **I. ACCESS**

1. Create and name Access databases.
2. Create and modify tables using datasheet and design views.
3. Define and modify field names, data types, and field properties.
4. Set primary keys.
5. Enter, add, delete, modify, and navigate through records and fields using datasheet and design views.
6. Discuss shortcut keys/commands.
7. Cut, copy, paste, and paste append data/records.
8. Find and replace data/records.
9. Define table relationships.
10. Enforce referential integrity.
11. Create, save, and print queries, forms, and reports.
12. Modify queries, forms, and reports in various views.
13. Modify the design of forms and reports in various views.
14. Import and export data to and from Access.

15. Sort and/or filter records.
16. Save database objects as file types.
17. Print preview and print database objects.
18. Compact and repair a database.
19. Use the Backstage environment (MS Office 2010 users only).
20. Use the Help feature.

**J. Project/Simulation Learning**

1. Produce documents integrating word processing, spreadsheet, database, and/or presentation files.
2. Apply problem solving and critical thinking skills to projects and/or simulations (cross-curricular or team teaching).

**Revised June 2011**