Computer Applications for Business Curriculum Maps

Grade: 9 - 12 **Subject:** Computer Applications for Business	**Unit of Study: Business Communications/Word Processing**
Big Idea/Rationale	There are times when electronic communications are not sufficient and formal memoranda and letters must be created, printed as a hard copy, and sent to an individual or business. Examples are: - when an original receipt must be attached - when a damaged item must be returned - when a legal document with original signatures and seals must be sent - when existing or potential customers do not own a computer or are not connected to the Internet
Enduring Understanding (Mastery Objective)	- Memoranda are communications sent within an organization and are generally shorter and to the point - Letters are communications sent from an individual to another individual or a company, or from a company to an individual or another company - Letters are more formal documents - Memos and letters should project a positive image of the writer - The content of a letter or memorandum should project a positive image of the company
Essential Questions (Instructional Objective)	- Why would uncorrected errors in spelling and grammar project a negative image? - Under what circumstances would electronic mail be an insufficient manner of communicating with customers? - Why do some companies send email messages and regular messages via the US Postal Service?
Content (Subject Matter)	- Create and edit formatted and unformatted memoranda - Use own form - Use pre-formatted templates - Add bulleted lists and displays - Identify the parts of a memo - Create and edit business letters - Create letterhead - Identify the parts of a personal business letter - Apply various formatting styles - Block - Modified Block with blocked paragraphs - Modified Block with indented paragraphs - Apply various punctuation styles - Recognize the need for enclosure, copy, and additional notations - Create and format envelopes - Use spell checker, word count, undo, redo, save, and other features

	- Other:
- Key and edit text in a document
- Saving a document
- Printing a document
- Proper formatting procedures
- Spelling and punctuation
- Proofreading
- Margins
- Parts of a memo and letter
- Pressing enter in between parts of a letter
- Writer's and Typist's initials
- Typing attachment/enclosure
Skills/ Benchmarks (CCSS Standards)	- 9.4.12.K.1 Demonstrate language arts knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
- 9.4.12.K.8 Use correct grammar, punctuation, and terminology to write and edit documents.
- 9.4.12.K.27 Operate writing and publishing applications to prepare communications.
- 9.4.12.K.36 Analyze and summarize the use of information technology to enhance business
Materials and Resources	LCD Projector, Slide Show Presentations, Handouts, 21st Century Cart, MicroType Pro
Notes	

Grade: 9 - 12 Subject: Computer Applications for Business	Unit of Study: Database
Big Idea/Rationale	A database is used by government, businesses, and individuals to organize and manage data. It is the basis for writing payroll checks, collecting taxes, keeping medical records, taking attendance, printing report cards, etc.
Enduring Understanding (Mastery Objective)	• Developing a database that communicates specific information requires careful analysis and planning • Determining the purpose of the database and who the intended users will be and what their special needs are is essential • Queries can identify records that meet specific criteria • Queries can reveal relationships between and among data
Essential Questions (Instructional Objective)	• How does the government use a database • How does our school use a database? • If you had a business, how would you use a database for your inventory? • In your personal life, what data would you organize in a database?
Content (Subject Matter)	• Create, save, retrieve, and revise database files which include tables, simple forms, custom reports, and queries • Create and format different types of fields • Input data from multiple records • Add and delete records • Print the contents of a table • Include selected fields in query design grid • Use text and numeric data as criteria as well as compound criteria in query design grid • Sort data in queries • Join tables in queries • Perform calculations in queries • Use grouping in queries • Create crosstab queries • Plan a multi-table database to avoid redundancy • Sort files • Understand how database can be integrated with other applications
Skills/ Benchmarks (CCSS Standards)	• 9.4.12.K.1 Demonstrate language arts knowledge and skills required to pursue the full range of postsecondary education and career opportunities. • 9.4.12.K.2 Demonstrate mathematics knowledge and skills required to pursue the full range of postsecondary education and career opportunities • 9.4.12.K.8 Use correct grammar, punctuation, and terminology to write

	and edit documents. • 9.4.12.K.12 Develop and interpret tables, charts, and figures to support written and oral communications. • 9.4.12.K.20 Conduct technical research to gather information necessary for decision-making. • 9.4.12.K.30 Employ database applications to manage data. • 9.4.12.K.36 Analyze and summarize the use of information technology to enhance business effectiveness. • 9.4.12.K.54 Identify and demonstrate positive work behaviors and personal qualities needed to succeed in the classroom and/or to be employable. • 9.4.12.K.56 Demonstrate skills related to seeking and applying for employment in a desired job. • 9.4.12.K.77 Perform standard computer backup procedures to protect information.
Materials and Resources	LCD Projector, slide show presentations, handouts, Microsoft Office
Notes	

Grade: 9 - 12 **Subject:** Computer Applications for Business	**Unit of Study: Create and Edit Word Documents**
Big Idea/Rationale	Creating flyers that contain pictures, graphic borders, and text effects is a great way to communicate an idea quickly and effectively.
Enduring Understanding (Mastery Objective)	• Carefully selected words and phrases is an effective way to communicate an idea or message quickly • Appropriate graphics, color selection, and other text effects can help attract the attention of the target audience
Essential Questions (Instructional Objective)	• How are flyers used in our school? • How can a business use a flyer to promote sales and introduce new products? • How does our government use flyers? • Name some places where you see flyers outside of school • Name some other uses of flyers that can benefit the general well being of citizen?

Content (Subject Matter)	• Create flyers enhanced with graphics, clip art, and web-based images
	• Format text and paragraphs
	    o Change fonts and font styles
	    o Insert borders
	    o Add shading and other fill effects
	    o Customize bullets
	• Default Settings
	• Headings
	• Paragraphs in Word
	• Enter vs. Word Wrap
	• Short cut list of suggested words for flagged words
	• Save vs. Save as
	• Saving to a USB drive and network drive
	• Headline
	• Signature
	• Undo and Redo Quick Access buttons
	• Returning to original color scheme
	• Adding pictures to Word documents

Skills/ Benchmarks (CCSS Standards)	• 9.4.12.K.1 Demonstrate language arts knowledge and skills required to pursue the full range of postsecondary education and career opportunities. • 9.4.12.K.8 Use correct grammar, punctuation, and terminology to write and edit documents. • 9.4.12.K.26 Operate Internet applications to perform tasks. • 9.4.12.K.27 Operate writing and publishing applications to prepare communications.
Materials and Resources	LCD Projector, slide show presentations
Notes	

Grade: 9 - 12 **Subject:** Computer Applications for Business	**Unit of Study: Networking**
Big Idea/Rationale	Information sharing is the No. 1 reason to use a network. We use networks every day to provide services we cannot live without (ATM machines, cell phones, Internet)

Enduring Understanding (Mastery Objective)	• A good network has five essential characteristics:
	    o Reliability - can trust it to work at all times with little downtime
	    o Scability - can grow to meet needs by adding more computer stations and/or memory
	    o Redundancy - backup servers and hard drives to prevent loss of data
	    o Security - use passwords, firewalls and physical security (locked rooms and cabinets)
	    o Speed - can handle traffic without slowing down
	• Sharing of resources can be a money-saving move
	• Administration and support of the network can be accomplished from a single location
	• Networks began with the government and major universities at the end of WWII to ensure undisrupted communication in case of nuclear attack

Essential Questions (Instructional Objective)	• Can you describe two networks here at Spotswood High School and how they work? • How do we share resources in our networked classroom? • What essential operations are accomplished by a department store's networked cash registers? • What types of companies (similar to banks with ATMs) have networks that can be accessed by the public?
Content (Subject Matter)	• Introduction to Computer Networking • Define a computer network and its characteristics • Explain the reasons for using a network • Show how networks are useful • Identify traits that make a good network • Identify key characteristics of the first networks, today's networks, and tomorrow's networks • Identify four career paths in networking (Windows predecessor) • Identify the average salary for a networking professional • Identify the four main parts of a computer system (hardware, software, data, and users) • Identify the key pieces of hardware and brief history of the development of computers • Identify types and classes of networks

	• Identify the characteristics (speed, distance, general capabilities) of coaxial cable, twisted-pair, fiber-optic cable) • Identify the security risks inherent in wireless networking • History of the Internet • Security risks in wireless networking • Characteristics of cables
Skills/ Benchmarks (CCSS Standards)	• 9.1.12.A.1 Apply critical thinking and problem-solving strategies during structured learning experiences • 9.1.12.C.1 Enlist input from experts in the field, community members, and other stakeholders to design a service-learning activity that addresses a local, national, or worldwide need. • 9.4.12.K.(1).1 Identify and analyze an individual's or a business organization's network system needs and requirements to design a network.
Materials and Resources	LCD Projector, Internet access - www.cisco.com and youtube videos, slide show presentations, handouts, 21st century cart, MicroType Pro
Notes	

Grade: 9 - 12 Subject: Computer Applications for Business	Unit of Study: Master Keyboarding Techniques
Big Idea/Rationale	Students will use the touch method of keyboarding to prevent injuries and promote accuracy and speed
Enduring Understanding (Mastery Objective)	- Students will identify and demonstrate the ten skills that make up ergonomic techniques and demonstrate proper techniques of alpha-numeric keyboard and 10-key pad to promote a healthy life style while using the computer - A tool is only as good as the person using it - Technology is constantly changing and requires continuous learning of new skills - Students will be responsible for preventing injuries while using a computer - Accurate documents reflect one's image and the image of one's company
Essential Questions (Instructional Objective)	- How does good posture help to promote good health? - How does an accurate document promote a positive image? - How does speed influence one's image? - How can you use technology to advance your learning in high school and beyond?
Content (Subject Matter)	- Demonstrate proper keyboarding techniques of alpha-numeric keyboard and 10-key pad by touch - Proper Ergonomic Posture - Proper Seating - Proper Hand and Feet Placement - Finger used to backspace, space, and enter keys
Skills/ Benchmarks (CCSS Standards)	9.4.12.K.1 Demonstrate language arts knowledge and skills required to pursue the full range of postsecondary education and career opportunities. 9.4.12.K.8 Use correct grammar, punctuation, and terminology to write and edit documents. 9.4.12.K.27 Operate writing and publishing applications to prepare communications. 9.4.12.K.54 Identify and demonstrate positive work behaviors and personal qualities needed to succeed in the classroom and/or to be employable.
Materials and Resources	LCD projector, slide show presentations, handouts, Microsoft Office

| **Notes** | |

Grade: 9 – 12 **Subject:** Computer Applications for Business	**Unit of Study: Multimedia Presentations**
Big Idea/Rationale	Multimedia presentations are a graphic means of presenting information to enhance a message
Enduring Understanding (Mastery Objective)	• Multimedia presentations allow presenters to present information visually which makes the delivery of the content more efficient and the information more memorable • Multimedia presentations can display graphs, charts, and other components that make the content more interesting and easier to understand
Essential Questions (Instructional Objective)	• What are the characteristics of a successful multimedia presentation? • How are multimedia presentations used in the business world? In school?
Content (Subject Matter)	• Create and design presentations • Apply design templates • Apply custom backgrounds • Incorporate animations and transitions • Add an animation scheme • Run an animated slide show • Insert appropriate sound files • Insert, move, and resize graphics • Apply various slide layouts including single and multi-level bulleted lists • Follow the 7x7 rule • Print slides, handouts, outlines • Add, delete, and reorder slides • Add header and footer to slides and handouts
Skills/ Benchmarks (CCSS Standards)	• 9.4.12.K.1 Demonstrate language arts knowledge and skills required to pursue the full range of postsecondary education and career opportunities. • 9.4.12.K.8 Use correct grammar, punctuation, and terminology to write and edit documents. • 9.4.12.K.9 Develop and deliver formal and informal presentations using appropriate media to engage and inform audiences. • 9.4.12.K.11 Apply active listening skills to obtain and clarify information. • 9.4.12.K.20 Conduct technical research to gather information necessary for decision-making. • 9.4.12.K.26 Operate Internet applications to perform tasks.

	9.4.12.K.27 Operate writing and publishing applications to prepare communications. 9.4.12.K.28 Operate presentation applications to prepare and deliver presentations. 9.4.12.K.36 Analyze and summarize the use of information technology to enhance business effectiveness. 9.4.12.K.77 Perform standard computer backup procedures to protect information. - TEC 9-12.8.1.12.A.5 Produce a multimedia project using text, graphics, moving images, and sound - TEC -12.8.1.12.B.7 Evaluate information sources for accuracy, relevance, and appropriateness
Materials and Resources	LCD projector, slide show presentations, handouts, Microsoft Office
Notes	

Grade: 9 - 12 **Subject:** Computer Applications for Business	**Unit of Study: Reports**
Big Idea/Rationale	Accurate formatting and keying of reports is a skill that will be used in high school, in college, and in the professional world. If created according to the guidelines, it will encourage the reader to have confidence in the quality of the research as well.
Enduring Understanding (Mastery Objective)	• Paying attention to detail is a skill that can be transferred to every aspect of computer education from word processing to programming • Following directions step by step is a skill that can be transferred to every aspect of computer education from word processing to programming • Organizing ideas and presenting research results through written communication is a skill that is needed throughout our formal schooling and into the professional world • Giving others credit for their ideas will avoid the danger of being accused of plagiarism
Essential Questions (Instructional Objective)	• What are the report formats that are used in our high school and many local colleges? • What is plagiarism and how can it be avoided? • Why is it important to find and correct all errors in format as well as in text?

Content (Subject Matter)	• Create outlines
	   o Format standard Harvard outline
	   o Use pre-formatted templates
	• Single and multi-page reports in Academic format
	   o Setting margins
	   o Line spacing
	   o Paragraph format
	   o Identify parts
	   o Formatting tiles and bylines
	   o Formatting side headings and paragraph headings
	   o Formatted and unformatted text and rough drafts
	• Format reference pages
	• Format parenthetical references and short/long quotations
	• Automatic page numbering

Skills/ Benchmarks (CCSS Standards)	• 9.4.12.K.1 Demonstrate language arts knowledge and skills required to pursue the full range of postsecondary education and career opportunities. • 9.4.12.K.8 Use correct grammar, punctuation, and terminology to write and edit documents.

	9.4.12.K.27 Operate writing and publishing applications to prepare communications. 9.4.12.K.36 Analyze and summarize the use of information technology to enhance business
Materials and Resources	LCD Projector, slide show presentations, handouts, 21st century cart, MicroType Pro
Notes	

Grade: 9 - 12 **Subject:** Computer Applications for Business	**Unit of Study: Create and Edit Spreadsheets**
Big Idea/Rationale	• Spreadsheets present financial and/or numeric data in an organized way • The use of formulas to recalculate results quickly when data changes is what makes it so dynamic
Enduring Understanding (Mastery Objective)	• Formulas allow for instant recalculation • The same rules for the use of mathematical operators apply to formulas in EXCEL • Garbage In - Garbage Out: Accurate data and formulas are necessary to produce accurate results • Spreadsheets allow you to make predictions by using "What if" questions • Data can be represented as charts as well as organized in table format • The use of specialized EXCEL "language" will add to your professionalism and facilitate your ability to communicate with other professionals • Formatting data must be attractive and must make it easier to read the data
Essential Questions (Instructional Objective)	• What kind of data and information would a business present in spreadsheet format? • How would the scientific community use a spreadsheet to present information • When do you use a line chart? • When do you use a bar or column chart? • What kind of personal financial information could be organized on a spreadsheet?
Content (Subject Matter)	• *MS Office 2007 Introductory Concepts and Techniques* - Pp. EX1-EX159
Skills/ Benchmarks (CCSS Standards)	• 9.4.12.K.2 Demonstrate mathematics knowledge and skills required to pursue the full range of postsecondary education and career opportunities • 9.4.12.K.12 Develop and interpret tables, charts, and figures to support written and oral communications. • 9.4.12.K.20 Conduct technical research to gather information necessary for decision-making. • 9.4.12.K.29 Employ spreadsheet applications to organize and manipulate data. • 9.4.12.K.36 Analyze and summarize the use of information technology to enhance business effectiveness.

Materials and Resources	- Stock Research Worksheet - Stock Market Challenge - Internet Shopping Spree data - Project 1 Test - Project 2 Test - InFocus Projector, Access to Internet - yahoo.com - Finance, msn.com - Investing
Notes	

Grade: 9 - 12 Subject: Computer Applications for Business	Unit of Study: Tables
Big Idea/Rationale	• Tables provide an organized and concise method of presenting data. • It is faster and easier to find the information than when it is presented in paragraph format
Enduring Understanding (Mastery Objective)	• The more technical the data, the better it lends itself to table presentation • Tables make it easier to remember the data and information • Tables can easily be sorted and resorted to present the data in different ways • Tables can be easily updated
Essential Questions (Instructional Objective)	• What features does a table contain that make it easier to find needed data? • What type of data can be sorted in different ways to present a different view? • If tables are so helpful, why can't we present all written communications that way?
Content (Subject Matter)	Selected exercises from *Century 21, 8th edition, Computer Applications and Keyboarding*, Pp. 88-98, 105, 106, 112, 189-201, 209, 210
Skills/ Benchmarks (CCSS Standards)	• 9.4.12.K.1 Demonstrate language arts knowledge and skills required to pursue the full range of postsecondary education and career opportunities. • 9.4.12.K.8 Use correct grammar, punctuation, and terminology to write and edit documents. • 9.4.12.K.12 Develop and interpret tables, charts, and figures to support written and oral communications. • 9.4.12.K.27 Operate writing and publishing applications to prepare communications.
Materials and Resources	LCD Projector
Notes	

Grade: 9 - 12 Subject: Computer Applications for Business	Unit of Study: Web Design
Big Idea/Rationale	Web pages are viewed by using a large-screen television monitor, a cell phone, or even a device that renders Web pages in Braille or in aural speech as well as the traditional computer.
Enduring Understanding (Mastery Objective)	• The W3C (World Wide Web Consortium) developed standards that were to be followed by all browser manufacturers so Web pages can be viewed the same way • Tools needed to create and view HTML documents: basic text editor, Web browser, Web server • Web pages should be easy to navigate • Use balance, proximity, and white space to create effective, organized Web pages • Use contrast to stimulate interest and establish a focal point • Generate a sense of unity across all pages • When writing for the Web use language that is straightforward, contemporary, and geared toward and educated audience • To establish credibility, provide accurate, verifiable content • Create fast-loading Web pages • Ensure page is free of copyright infringement
Essential Questions (Instructional Objective)	• What purposes does a Web page serve? • Explain the four advantages that Web pages possess over printed media: currency, interactivity, cost, and delivery • How can Web pages be categorized? communication, education, entertainment and news, business
Content (Subject Matter)	*Reference a chapter, article, presentation, discussion, sample project*
Skills/ Benchmarks (CCSS Standards)	• 9.4.12.K.1 Demonstrate language arts knowledge and skills required to pursue the full range of postsecondary education and career opportunities. • 9.4.12.K.8 Use correct grammar, punctuation, and terminology to write and edit documents. • 9.4.12.K.26 Operate Internet applications to perform tasks. • 9.4.12.K.75 Demonstrate knowledge of Web page basics to convey an understanding of Web page design and functioning. • 9.4.12.K.77 Perform standard computer backup procedures to protect information.
Materials and Resources	LCD Projector, Internet access, www.w3c.org

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