

Computer Applications

(20-Week Course)

Month	Content	Skills	Assessment	Essential Questions
September	Computer Literacy Skills & the Internet	<ul style="list-style-type: none"> Understand the difference between Internet Browsers and Search Engines. Apply Internet search strategies to locate information efficiently using advanced options and Boolean operators. Evaluate websites for accuracy and relevancy. Use cross referencing to validate sources. Identify web address information to determine sources. Navigate the school website and computer department webpages to access important information. 	<ul style="list-style-type: none"> Class discussions & demonstrations Hands-on computer practice Teacher observation Written homework Activity: Internet Scavenger Hunt Quiz 	<ul style="list-style-type: none"> Why is it important to evaluate a website source? How can you apply computer literacy skills outside of the classroom?
	Review of Computer Skills Word Processing <ul style="list-style-type: none"> Common Features in Microsoft Word File Management <ul style="list-style-type: none"> Using Windows Explorer to Manage Files & Folders 	<ul style="list-style-type: none"> Identify the parts of the word processing screen. Review basic word processing operations: opening files, saving, word wrap, and inserting images. Format existing documents using fonts, font sizes, styles, and alignment. Create personal folders and organize classwork files into subfolders. 	<ul style="list-style-type: none"> Hands-on computer practice Teacher observation Application of skills in research project 	

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	History & Advancements in Technology <ul style="list-style-type: none"> • Computers • Communication 	<ul style="list-style-type: none"> • Identify and categorize examples of technology. • Share interviews with family and friends regarding technology of the past. • Search for examples of “old” technology. Use objects in class for discussion, explain related advancements in technology, and assemble Technology Museum. • Apply computer literacy skills to locate relevant sources for research project. • Understand the history of communication and related inventions. • Identify technological advancements that characterize the four generations of computers in the 20th century. • Discuss how technology impacts the history of major events. 	<ul style="list-style-type: none"> • Group brainstorming sessions • Class discussions • Internet Research Project: Technology Timeline • Mystery Activity: Why is Columbus credited with the discovery of America? 	<ul style="list-style-type: none"> • How does technology impact our daily lives?
	Smart Consumers	<ul style="list-style-type: none"> • Identify components of the demonstration computer and understand what jobs they perform. • Understand what specifications to look for when purchasing a new computer. • Convert measurements in bits, bytes, kilobytes, etc. 	<ul style="list-style-type: none"> • Computer demonstration and class discussion • Written homework • Team Review: Unit Trivia Challenge • Test 	<ul style="list-style-type: none"> • In what ways do you expect future technology to impact schools, businesses, and communication?

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October	Software: Microsoft Word <ul style="list-style-type: none"> Character Formatting Options 	<ul style="list-style-type: none"> Review common text formatting options such as fonts, sizes, and color. Use the formatting windows and toolbars to access formatting shortcuts. Apply advanced formatting options to document text (font effects). 	<ul style="list-style-type: none"> Hands-on computer practice Teacher observation Hands-on exercises 	
	<ul style="list-style-type: none"> Paragraph Formatting 	<ul style="list-style-type: none"> Apply formatting to paragraphs to change alignment, line spacing, indentation, and tabs. Use the ruler to set tabs and left and right indents. Use the Show/Hide Paragraph Button to reveal spaces, tabs, and end of paragraph markers. 	<ul style="list-style-type: none"> Hands-on computer practice Teacher observation Hands-on exercises Tabs Quiz Team Review: Unit Trivia Challenge Test (written and hands-on) 	
	<ul style="list-style-type: none"> Page Formatting 	<ul style="list-style-type: none"> Recognize how page formatting options are applied to entire documents. Apply page formatting options to documents: margins, headers/footers, page numbering, paper size, orientation. 	<ul style="list-style-type: none"> Hands-on computer practice Teacher observation Hands-on exercises Team Review: Unit Trivia Challenge Test 	

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November	<ul style="list-style-type: none"> Newsletter Features 	<ul style="list-style-type: none"> Identify and explain how newsletter features are used in sample documents. Transform existing documents using columns, images, text wrapping, styles, and borders. Understand how sections can be used to format parts of your document rather than the entire document. Customize Word by saving collections of formatting options as styles. Use styles to format a newsletter consistently and efficiently. 	<ul style="list-style-type: none"> Hands-on computer practice Teacher observation Hands-on exercises Project: Department Newsletter Team Review: Unit Trivia Challenge Test 	
	<ul style="list-style-type: none"> Tables (*If time permits.) 	<ul style="list-style-type: none"> Identify parts of the table and use headings to organize information into rows and columns. Modify table appearance by adjusting row height, column width, borders, and shading. Sort table information using column heading in ascending or descending order. 	<ul style="list-style-type: none"> Hands-on computer practice Teacher observation Hands-on exercises 	

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December	Software: Microsoft Excel <ul style="list-style-type: none"> • Introduction to Spreadsheets, Data Entry, & Automatic Features 	<ul style="list-style-type: none"> • Identify parts of the spreadsheet windows and label cell addresses. • Use automatic features to enter cell data. • Edit cell contents using keyboard and mouse techniques. • Use the Internet to look up stock performance of 5 companies and record data in a spreadsheet. 	<ul style="list-style-type: none"> • Hands-on computer practice • Teacher observation • Hands-on exercises 	
	<ul style="list-style-type: none"> • Mathematical Equations 	<ul style="list-style-type: none"> • Create mathematical formulas to perform addition, subtraction, multiplication, and division. • Use mathematical functions to calculate the sum or average for a range of cells. 	<ul style="list-style-type: none"> • Hands-on computer practice • Teacher observation • Written homework • Quiz 	
	<ul style="list-style-type: none"> • Spreadsheet Formatting 	<ul style="list-style-type: none"> • Apply text formatting to cells (fonts, alignment, number styles, borders, shading). • Adjust overall spreadsheet appearance (column width, row height, printable row and column headings, print areas, page margins, orientation). 	<ul style="list-style-type: none"> • Hands-on computer practice • Teacher observation • Team Review: Unit Trivia Challenge • Test 	

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	<ul style="list-style-type: none"> Charts 	<ul style="list-style-type: none"> Identify the different types of charts and explain the purpose of each (pie, bar, column, line). Label the parts of each chart type. Display numerical data using charts as a visual aid. 	<ul style="list-style-type: none"> Hands-on computer practice Teacher observation Project: Stock Market Project 	
January	Software: Microsoft Visual Basic <ul style="list-style-type: none"> Introduction to Visual Basic and Computer Programming. 	<ul style="list-style-type: none"> Understand how object-oriented programming is used to create Windows programs. Identify the parts of the screen interface, toolbox, toolbars, and project windows. Create a form containing objects such as buttons, textboxes, labels, and images. 	<ul style="list-style-type: none"> Written homework Hands-on computer practice Teacher observation Hands-on exercises 	
	<ul style="list-style-type: none"> Create Simple Programs 	<ul style="list-style-type: none"> Use the Code Editor to write simple program instructions and run simple programs. Change object property values to control the appearance, behavior, and position of form objects. Use assignments to create mathematical expressions and generate numeric values. Run a program and correct errors by editing instructions in the Code Editor. 	<ul style="list-style-type: none"> Hands-on computer practice Teacher observation Hands-on exercises Test Project: Educational Game 	

