

Technology Curriculum For Emmanuel Lutheran School

The use of technology is an essential skill in today's world. The technology curriculum is intended to help students to develop proficiencies, as well as the ability to communicate with other people in meaningful ways.

In order to effectively utilize technology, students need to acquire a range of skills and some specific knowledge. The expectations identified for each grade describe the specific knowledge and skills that students are expected to develop and demonstrate in their work. These skills are sequential and cumulative.

LARGE SCALE GOALS


Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit Christian behavior in the use of computer and other technologies.

Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies.

Competency Goal 3: The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information.

STRANDS

1= Societal Issues; 2 = Database; 3 = Spreadsheet; 4= Keyboard Utilization/Word Processing/Desktop Publishing; 5 = Multimedia/Presentation; 6 = Telecommunications/Internet
(number indicated after each objective indicates the strand under which it falls.)

NOTE: All standards and strands are based upon the North Carolina Standard Course of Study. Those standards marked with  are based upon Integrating the Faith.

Compiled in September, 2007

KINDERGARTEN


Focus Areas

- Parts of the computer and how to operate
- Keyboard familiarity
- Grouping and sequencing
- Respect for the work of others
- Responsible care of resources
- Exploring multimedia
- Observing online resources

Strands: 1= Societal Issues; 2 = Database; 3 = Spreadsheet; 4= Keyboard Utilization/Word Processing/Desk Top Publishing; 5 = Multimedia/Presentation; 6 = Telecommunications/Internet; number in parentheses after each objective below indicates the strand under which it falls.

Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit Christian behavior in the use of computer and other technologies.

Objectives:


- 1.01 Identify the computer as a machine that helps people work and play. (1)
- 1.02 Identify, discuss, and use common hardware terms/concepts (e.g., CPU, monitor, keyboard, mouse). (1)
- 1.03 Identify and discuss correct and responsible use and care of computers and resources (AUP/IUP). (1)
- 1.04 Demonstrate respect and Christian concern for the work of others.  (1)
- 1.05 Identify and discuss common features and functions of computer software (e.g., file, open, save, retrieve, draw). (1)
- 1.06 Identify basic word processing terms (e.g., file, menu bar, cursor, open, save, print). (4)
- 1.07 Identify and discuss characteristics of multimedia (e.g., text, sound, images, color) as a class. (5)
- 1.08 Identify and discuss multimedia terms/concepts beginning, middle, and end by arranging pictures in linear/sequential order as class/group. (5)
- 1.09 Recognize and discuss responsible use of multimedia resources and why it is important as a class. (5)
- 1.10 Discuss ownership of created works as a class/group. (5)
- 1.11 Identify and discuss the Internet as a source of information at school and home. (6)
- 1.12 Identify and discuss terms/concepts (online, digital information, Internet, links). (6)

Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies.

Objectives:

- 2.01 Use software to organize and display data as a class. (3)
- 2.02 Identify, discuss, and use word processing as a tool to enter letters, numbers and words. (4)
- 2.03 Identify, locate and use special keys (e.g., arrow keys, space bar, Shift, Enter/Return, Backspace, Delete), letters, and numbers on the keyboard. (4)
- 2.04 Use multimedia software to identify and practice letters, numbers, shapes, and colors as a class/group.

(5)

2.05 Use teacher-selected Internet resources/information to explore, identify, and discuss Christian ethics and behavior. 

2.06 Use teacher-selected Internet resources/information to discuss ownership of creative works of individuals/groups/companies as a class activity. (6)

GRADE 1 Focus Areas

- Respecting computer work of others
- Using technology at home and school
- Gathering, organizing, and displaying data
- Using word processing
- Exploring multimedia
- Responsible care of resources
- Observing online resources

Strands: 1= Societal Issues; 2 = Database; 3 = Spreadsheet; 4= Keyboard Utilization/Word Processing/Desk Top Publishing; 5 = Multimedia/Presentation; 6 = Telecommunications/Internet; number in parentheses after each objective below indicates the strand under which it falls.

Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit Christian behavior in the use of computer and other technologies.

Objectives:

1.01 Identify, discuss, and represent the uses of technology (e.g., computers, cell phones, digital cameras) at school and home. (1)

1.02 Identify and discuss physical components of a computing device (e.g., CPU, monitor, keyboard, disk drive, printer, mouse). (1)

1.03 Recognize and discuss safe and responsible use and care of technology resources. (1)


1.04 Discuss the source of computer-created documents. (1)

1.05 Identify and discuss graphing software terms/concepts in display. (3)

1.06 Recognize the rights of ownership of computer-created work of others. (4)

1.07 Recognize the characteristics of multimedia (e.g., text, audio, images, video). (5)

1.08 Identify and discuss multimedia terms/concepts (e.g. link/button, text box, navigate) as a class/group activity. (5)

1.09 Identify responsible, Christian, and safe online behavior and discuss why it is important  . (5)

1.10 Recognize, discuss, and cite various types of resources as a class. (5)

Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies.

Objectives:

2.01 Use common computing devices and resources in class activities. (1)

- 2.02 Observe, discuss, and use software to display data as a class/group. (3)
- 2.03 Identify, discuss, and use word processing as a tool to enter numbers, words, and phrases. (4)
- 2.04 Identify and use basic word processing terms (e.g., file, open, close, menu bar, save, print). (4)
- 2.05 Locate and use letters, numbers, and special keys (e.g., arrow keys, space bar, insert Enter/Return, Backspace, Delete) on the keyboard. (4)
- 2.06 Identify, discuss, and use menu/tool bar functions in word processing applications. (4)
- 2.07 Use multimedia software to illustrate words/phrases/concepts. (5)
- 2.08 Explore Internet resources and information using teacher-created bookmarks/favorites and discuss the variety and types of information found as a class activity. (6)
- 2.09 Use teacher-selected Internet resources/information to identify, discuss, and chart elements that make an online resource useful, appropriate, and safe as a class. (6)

GRADE 2

Focus Areas

- Using technology in the community
- Respecting the computer work of others
- Observing online resource
- Using electronic database to locate information
- Responsible care of resources
- Building word processing skills
- Collecting, sorting, and displaying data
- Exploring multimedia tools
- Using drawing tools

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Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit Christian behavior in the use of computer and other technologies.

Objectives:

- 1.01 Identify, discuss and visually represent uses of digital technology in the community (e.g., bar code scanners, handhelds, mobile phones, optical storage devices, GPS's). (1)
- 1.02 Demonstrate correct use of common technology terms (e.g., hardware, software, CD, hard drive). (1)
- 1.03 Recognize the source of created documents. (1)
- 1.04 Identify and discuss print and electronic databases (e.g., phone book, automated circulation system, CD-ROM encyclopedias) as a way to collect, organize, and display data. (2)
- 1.05 Identify and discuss terms/concepts of search engines and keyword functionality. (2)
- 1.06 Identify spreadsheets as a tool to organize, calculate, and graph data to make predictions. (3)
- 1.07 Identify and use multimedia terms/concepts (e.g., storyboard, linear/sequential, audio/video clips, images). (5)

1.08 Identify and discuss issues (e.g., personal information, images, appropriateness and accuracy of information) to consider in selection and use of materials for multimedia projects. (5)

1.09 Identify terms/concepts (e.g., online, browser, navigation, resources, web address, webpage, weblinks). (6)

1.10 Identify responsible, Christian and safe online behavior and discuss why it is important. (6)

1.11 Identify online resources as the work of individuals/groups/companies and discuss why citing resources is necessary. (6)



1.12 Identify and discuss telecommunications/Internet as a tool for communication and collaboration to be used to the glory of God. (6)

Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies.

Objectives:

2.01 Recognize, discuss and use the features/functions of computing devices (e.g., creating, retrieving, saving, printing data). (1)

2.02 Use prepared electronic database (e.g., media circulation database, **CD-ROM encyclopedias**) as a class/group activity to conduct keyword search/filters to meet information needs. (2)

2.03 Enter/edit data in a prepared spreadsheet in content areas as a class/group and observe the changes that occur to make predictions. (3)

2.04 Recognize, discuss, and use word processing as a tool to enter/edit, print, and save assignments. (4)

2.05 Use and discuss basic word processing terms/concepts (e.g., desktop, menu/tool bar, document, text). (4)

2.06 Identify and use correct finger placement for home row keys. (4)

2.07 Identify and use menu/tool bar features/functions in word processing documents. (4)

2.08 Identify and use multimedia tools to combine text and graphics as a class/group assignment. (5)

2.09 Modify/edit an existing linear/sequential multimedia story to include student narration as a class/group activity. (5)

2.10 Use teacher-selected Internet resources to locate, discuss, and compare information about your local community as a class/group. (6)

GRADE 3


Focus Areas

- Awareness of Copyright Law
- Responsible and safe use of resources
- Exploring information technologies
- Building word processing techniques
- Using multimedia tools
- Exploring spreadsheets

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Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit Christian behavior in the use of computer and other technologies.

Objectives:

- 1.01 Identify, discuss, and chart uses of technology in the community (e.g., farmers, grocery, restaurant, veterinarian, medical and emergency services). (1)
- 1.02 Identify the function of common computing devices (e.g., input, output, processing). (1)
- 1.03 Recognize, discuss, and use correct and responsible behavior in the use of technology resources as a class, group, or individual. (1)
- 1.04 Demonstrate knowledge of individual's rights of ownership of created works by citing sources (Copyright Laws). (1)
- 1.04 Cite sources of information (print and nonprint) for a class project. (6)
- 1.06 Identify, discuss, and visually represent uses of databases in the community (e.g., school, grocery, pharmacy, business) to collect, organize, and display information. (2)
- 1.07 Identify, discuss, and use database terms (e.g., data entry, record, list, sort, and keyword, web browser, URL, keyword, search engine, weblinks). (2)
- 1.08 Recognize spreadsheets as a tool to organize, calculate, and graph information to make predictions. (3)
- 1.09 Identify and discuss spreadsheet terms/concepts (e.g., cell, column, row, values, labels, chart, graph). (3)
- 1.10 Identify and use formatting terms/concepts (e.g., font size/style, line spacing, margins, italic). (4)
- 1.11 Identify and discuss safe Christian guidelines for media (e.g., personal information, images, content, language) to consider in developing multimedia projects as a class.  (5)
- 1.12 Identify and discuss collaborative tools (e.g., email, messaging). (6)

Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies.

Objectives:

- 2.01 Select and use appropriate features and functions of hardware and software for class assignments. (1)
- 2.02 Discuss and select appropriate technology tools to collect, analyze, and display data. (1)
- 2.03 Use keywords on prepared search engine databases for acquiring information. (2)
- 2.04 Enter/edit data in a prepared spreadsheet to perform calculations. Identify and discuss the changes that occur as a class/group. (3)
- 2.05 Demonstrate correct finger placement for home row keys. (4)
- 2.06 Use menu/tool bar functions (e.g., font size/style, line spacing) to format and change the appearance of word processing documents as a class/group. (4)
- 2.07 Identify, discuss, and use multimedia tools (e.g., capture, create, edit, publish). (5)
- 2.08 Investigate teacher-selected Internet resources about communities; discuss and compare findings for usefulness as a class. (6)
- 2.09 Use Christian online resources (e.g., Lutheran Portal, Church and School Website, Voyages Online, etc.) 

Competency Goal 3: The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information.

Objectives:

3.01 Recognize, discuss, and use graphs to display and interpret data in prepared spreadsheets; identify and cite sources. (3)

3.02 Enter/edit data in a prepared spreadsheet to perform calculations and determine which graph best represents the data as a class/group. (3)

3.03 Use word processing as a tool to write, edit, and publish sentences, paragraphs, and stories. (4)

3.04 Identify, discuss, and use multimedia to present ideas/concepts/information in a variety of ways as a class. (5)

**GRADE 4
Focus Areas**

- Using databases
- Using spreadsheets
- Responsible and safe use of online resources
- Locating information on the Internet
- Evaluating information found through telecommunications
- Developing word processing documents
- Exploring e-mail
- Identifying ways technology has changed North Carolina

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Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit Christian behavior in the use of computer and other technologies.

Objectives:

1.01 Identify, discuss, and visually represent ways technology has changed the lives of people in North Carolina. (1)

1.02 Recognize, discuss, and use campus network folders and server. (1)

1.03 Recognize, discuss, and use responsible and safe behaviors when using technology resources (1)

1.04 Recognize that Copyright Laws and Fair Use Guidelines protect creative work of individuals/groups/companies by citing sources. (1)

1.05 Identify and discuss the benefits of non-networked and networked computers. (1)

1.06 Explore and discuss occupations/careers that use computers/technology tools in North Carolina. (1)

1.07 Identify, discuss, and visually represent how and why databases are used in North Carolina (e.g., schools, government, business, and science) to collect and organize information. (2)

1.08 Identify and discuss how spreadsheets are used to calculate and graph data in a variety of settings (e.g., schools, government, business, industry). (3)

1.10 Use published documents (e.g., letter, memo, newspaper) to identify and discuss document design and layout as a class. (4)

1.11 Identify and discuss the use of multimedia tools to report content area information. (5)

1.12 Recognize, discuss, and use multimedia terms/concepts (e.g., navigation buttons, transitions, links/hyperlinks, animation). (5)

1.13 Recognize and discuss telecommunications terms/concepts (e.g., browser, keyword, URL, hypertext, www). (6)

1.14 Recognize, discuss, and model responsible, safe and Christian behavior using online resources as a class/group/individual. (6)

Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies.


Objectives:

2.01 Sort and search a prepared content area database for information and use correct terms/concepts to explain strategies used as a class activity. (2)

2.02 Plan and use two criteria to search prepared databases to locate and organize information for content assignments. (2)

2.03 Identify, discuss, and use the spreadsheet terms/concepts (e.g., cell, column, row, values, labels, graph, formula). (3)

2.04 Enter/edit data in prepared spreadsheets to perform calculations using simple formulas (+, -, *, /) and observe the changes that occur. (3)

2.05 Use spreadsheets and s to organize, calculate, and display data in content areas. (3)

2.06 Identify, discuss, and use terms/concepts of menu/tool bar (e.g., print preview, page setup, Spell Check, thesaurus) in word processing documents as a class. (4)

2.07 Recognize, discuss, and use proper keyboarding techniques including finger placement. (4)

2.08 Recognize and discuss guidelines for media (e.g., personal information, images, content, language) to consider in developing multimedia projects as a class/group. (5)

2.09 Plan, discuss, and use search strategies with two or more criteria to find information online about North Carolina as a class/group. (6)

2.10 Identify, discuss, and use online collaborative tools (e.g., email, surveys) to collect data for content area assignments/projects. (6)

Competency Goal 3: The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information.

Objectives:

3.01 Select and use technology tools (e.g., digital camera, scanners) to collect, analyze, and display information for content assignments. (1)

3.02. Use databases to analyze and evaluate information in content areas and cite sources. (2)

3.03 Discuss, plan, and develop simple databases in content area to enter/edit, collect, organize, and display content data as a class. (2)

3.04 Enter data into prepared spreadsheets and select graph to best represent data and cite sources of data. (3)

3.05 Use spreadsheet data and graphs to make predictions, solve problems, and make decisions in content

areas as a class/group. (3)

3.06 Use word processing as a tool for writing, editing, and publishing paragraphs, stories, and assignments. (4)

3.07 Locate, select, organize, and present content area information from the Internet for a specific purpose and audience, citing sources. (6)

3.08 Use a rubric as a guide to select and evaluate digital resources and information for content and usefulness in content area assignments as a class. (6)

GRADE 5 Focus Areas

- Using search strategies
- Responsible and safe use of online resources
- Awareness and compliance with Copyright and Fair Use Guidelines
- Exploring the need for protection against viruses and vandalism
- Participating in curriculum-based telecommunication projects
- Developing word processing document using proper keyboarding techniques
- Developing multimedia presentation citing sources
- Developing a product using a database
- Evaluating resources and information for accuracy and usefulness
- Selecting and using a variety of technology tools

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Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit Christian behavior in the use of computer and other technologies.

Objectives:

1.01 Recognize, discuss, and visually represent changes in information technologies and the impact changes have in schools, workplace, and society in the United States. (1)

1.02 Recognize, discuss, and use terms/concepts related to the protection of computers, networks and information (e.g., virus protection, network security, passwords, firewalls, privacy laws). (1)

1.03 Recognize, discuss and use appropriate behavior related to computers, networks, digital information (e.g., security, privacy, passwords, personal information), and identify possible consequences of unethical behavior. (1)

1.04 Recognize and discuss how Copyright Laws and Fair Use Guidelines protect ownership of intellectual and personal property while discussing consequences of misuse. (1)

1.05 Demonstrate appropriate use of copyrighted materials in word processing documents used for content projects/assignments. (4)

1.06 Recognize and discuss methods used to protect computers, networks, and information from viruses, vandalism and intrusion with virus software. (1)

1.07 Explore and discuss occupations/careers that use computers/technology as a class/group. (1)

1.08 Recognize and discuss how and why databases are used in society. (2)

1.09 Recognize, discuss, and explore how spreadsheets are used to calculate, graph, and represent data in a

variety of settings (e.g., schools, government, business, industry, mathematics, science). (3)

1.10 Recognize and explain the advantages and disadvantages of using word processing to create content area projects/products. (4)

1.11 Identify and discuss multimedia terms/concepts (e.g., menu, navigation, multimedia, design). (5)

1.12 Recognize, discuss, and use online terms/concepts (e.g., search strategies, citing resources). (6)

Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies.

Objectives:

2.01 Use knowledge of database terms/concepts and functions to find information in prepared content area databases (2)



2.02 Cite sources of information from content area databases used in assignments. (2)

2.03 Create/modify simple content area databases to enter/edit, collect, organize, and display content data for class/group assignment/project, citing resources. (2)

2.04 Use spreadsheet terms/concepts and functions (e.g., median, range, mode) to calculate, represent, and explain content area assignments. (3)

2.05 Modify/create and use spreadsheets to solve problems by performing calculations using simple formulas and functions for individual, group, and/or class projects (e.g., +, -, *, /, average). (3)

2.06 Identify, discuss and use word processing menu/tool bar terms/concepts (e.g., import, portrait, landscape, copy and paste between two documents) to describe assignments/projects. (4)

2.07 Use proper keyboarding techniques to improve accuracy, speed, and general efficiency in computer operation. (4)

2.08 Demonstrate knowledge of word processing tools to develop documents, which include data imported from a spreadsheet/database as a class/group. (4)

2.09 Select and use word processing menu/tool bar features to edit/revise and change existing documents/projects/assignments. (4)

2.10 Plan, discuss, and use search strategies with two or more criteria to find information for assignments/projects/products about the world concepts. (6)

2.11 Model and explain the importance of responsible, safe and Christian behavior when using networked digital information (e.g., Internet, mobile phone, wireless, telephone). (6)

2.12 Recognize, discuss, and/or use email as a means of interactive communications. (6)

Competency Goal 3: The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information.

Objectives:

3.01 Select and use search strategies with two or more criteria in prepared databases to locate, organize, and present information for content area assignments. (2)

3.02 Use content area databases to analyze, evaluate, organize, and compare information for assignments. (2)

3.03 Modify/edit databases to organize, analyze, interpret data, and create reports (e.g., documents, multimedia project, and webpages). (2)

3.04 Enter/edit data into a spreadsheet to test simple "what if..." statements to solve problems and make

decisions in content area. (3)

GRADE 6 Focus Areas



- Responsible and safe use of online resources
- Using Copyright and Fair Use Guidelines
- Refining application skills
- Using formulas in a spreadsheet
- Using search strategy with two or more criteria in a database
- Increasing productivity and accuracy in keyboarding
- Using word processing, spreadsheet, database, and multimedia for assignments in all subject areas
- Locating and retrieving information using telecommunications
- Evaluating resources and information for accuracy and usefulness
- Selecting and using a variety of technology tools

Strands: 1= Societal Issues; 2 = Database; 3 = Spreadsheet; 4= Keyboard Utilization/Word Processing/Desk Top Publishing; 5 = Multimedia/Presentation; 6 = Telecommunications/Internet; number in parentheses after each objective below indicates the strand under which it falls.

Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit Christian behavior in the use of computer and other technologies.

Objectives:

1.01 Recognize, discuss, and visually represent knowledge of changes in information technologies and the impact changes have on schools, workplaces and society. (1)

1.02 Recognize, discuss and implement Copyright Laws as they protect ownership of intellectual property and discuss consequences of misuse. (1)

1.03 Identify and discuss minor hardware and software issues/problems as a class/group. (1)

1.04 Identify and discuss technology skills needed in the workplace and how they impact school students today as a class/group.(1)

1.05 Recognize and discuss how and why databases are used to collect, organize, and analyze information in a variety of settings. (2)

1.06 Identify and use database terms/concepts (e.g., reports, layout, format) to describe and explain findings. (2)

1.07 Cite sources of information used in content area databases. (2)

1.08 Recognize and discuss use of spreadsheets to calculate, graph, and present data in a variety of settings (e.g., schools, government, business, industry, mathematics, science). (3)

1.09 Identify, discuss and use terms/concepts (e.g., minimize document, resize document, toggle between two open documents on the desktop). (4)

1.10 Recognize, discuss, and establish Christian guidelines for use of personal and copyrighted media (e.g., images, music, video, content, language) in multimedia projects and presentations as a class/group. (5)

1.11 Recognize, discuss, and model correctly formatted citations for copyrighted materials and adhere to Fair Use Guidelines. (5)

1.12 Identify and discuss terms/concepts associated with safe, effective, and efficient use of the telecommunications/Internet (e.g., password, firewalls, Spam, security). (6)

1.13 Demonstrate knowledge of responsible, safe, and Christian use of networked digital information (e.g., Internet, mobile phone, wireless). (1)

Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies.

Objectives:

2.01 Recognize, discuss, and use multi-tasking concepts (e.g., windows, toggle between two windows on the desktop, copy and paste data between two windows on the desktop). (1)

2.02 Investigate, discuss, and explain why computers, networks, and information must be protected from viruses, vandalism and intrusion, both malicious and mischievous. (1)

2.03 Use spreadsheet terms/concepts and functions to calculate, represent, and explain content area findings. (3)

2.04 Use proper keyboarding techniques to improve accuracy, speed and general efficiency in computer operation. (4)

2.05 Use word processor menu/tool bar features to publish for a specific audience and purpose. (4)

2.06 Demonstrate knowledge of the advantages/disadvantages of using multimedia to develop, publish, and present information to a variety of audiences. (5)

2.07 Identify, discuss, and use multimedia terms/concepts (e.g., multimedia authoring, web tools) to develop content projects as a class/group. (5)

2.08 Use menu/tool bar features to edit/modify/revise multimedia projects to present content information for a different audience and purpose. (5)

2.09 Select and justify the use of appropriate online collaborative tools (e.g., surveys, email, discussion forums, webpages) to develop content area presentations for the intended audience and purpose. (6)

Competency Goal 3: The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information.

Objectives:

3.01 Select and use responsibly a variety of computing devices to collect, analyze and present content area information. (1)

3.02 Plan and develop database reports (e.g., Microsoft Word, Excel, etc.) to organize, explain, and display findings in content areas as class/group. (2)

3.03 Develop and use search strategies with two or more criteria to solve problems and make decisions in content areas. (2)

3.04 Use database sort and search/filter strategies to organize, analyze, interpret, and evaluate findings in content areas and cite sources. (2)

3.05 Enter/edit data and use spreadsheet features and functions to project outcomes and test simple "what if..." statements in content assignments. (3)

3.06 Select and use chart/graph functions to analyze and display findings in content projects, citing data sources. (3)

3.07 Modify/create spreadsheets to calculate and graph data to incorporate into content area projects (e.g., word processing, multimedia, webpages). (3)

3.08 Modify/create and use spreadsheets to solve problems, make decisions, support, and display findings in content areas projects. (3)

3.09 Demonstrate knowledge of the advantages/disadvantages of using word processing to develop, publish, and present information to a variety of audiences. (4)

3.10 Select and use Word Processor features/functions to design, format, and publish assignments/products. (4)

3.11 Use rubrics to evaluate multimedia presentations for elements (e.g., content, organization, accuracy, design, purpose). (5)

3.12 Plan, collect, evaluate, interpret, and use information from a variety of resources to develop assignments about the Eastern Hemisphere, Europe, and Former Soviet Republics. (6)

3.13 Use evaluation tools to select Internet resources and information for content and usefulness in content area assignments. (6)

GRADE 7 Focus Areas

- Responsible and safe use of online resources
- Using Copyright and Fair Use Guidelines
- Refining application skills
- Using formulas in a spreadsheet
- Using search strategy with two or more criteria in a database
- Increasing productivity and accuracy in keyboarding
- Using word processing, spreadsheet, database, and multimedia for assignments in all subject areas
- Locating and retrieving information using telecommunications
- Evaluating resources and information for accuracy and usefulness
- Selecting and using a variety of technology tools

Strands: 1= Societal Issues; 2 = Database; 3 = Spreadsheet; 4= Keyboard Utilization/Word Processing/Desk Top Publishing; 5 = Multimedia/Presentation; 6 = Telecommunications/Internet; number in parentheses after each objective below indicates the strand under which it falls.

Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit Christian behavior in the use of computer and other technologies.

Objectives:

1.01 Identify and describe the effect technological changes have had on business, transportation, communications, industry, and agriculture in a global society. (1)

1.02 Use network terms and concepts related to local and wide area networks and Internet connectivity. (1)

1.03 Use safe, and responsible behavior relating to issues (e.g., security, privacy, passwords, personal information) and recognize possible consequences of misuse. (1)

1.04 Recognize and discuss how Copyright Laws protect ownership of intellectual property and identify and discuss consequences of misuse. (1)

1.05 Investigate technology knowledge and skills needed for the workplace now and in the future. (1)

1.06 Demonstrate knowledge of why databases are used to collect, organize, and report information in a

variety of settings. (2)

1.07 Use knowledge of database terms/concepts, functions, and operations to describe and explain content area findings. (2)

1.08 Cite sources of information used in content area databases. (2)

1.09 Demonstrate knowledge that spreadsheets are used to process information in a variety of settings (e.g., schools, government, business, industry, mathematics, science). (3)

1.10 Use spreadsheet and graphing terms/concepts to present and explain content area assignments. (3)

1.11 Cite sources of information used in content area spreadsheets. (3)

1.12 Demonstrate knowledge of the advantages/disadvantages of using word processing to develop, publish, and present information to a variety of audiences. (4)

1.13 Demonstrate knowledge and use of Word Processing terms/concepts (e.g., columns, tables, using multiple files and/or applications) to create and publish assignments/projects. (4)


1.14 Demonstrate appropriate use of copyrighted materials in word processing documents used for content projects/assignments. (4)

1.15 Demonstrate knowledge of multimedia tools/concepts used by media (e.g., games, video, radio/TV broadcasts, websites) to entertain, sell, and influence ideas and opinions. (5)

1.16 Demonstrate knowledge of multimedia by using terms/concepts to describe and explain content projects/products. (5)

1.17 Recognize, discuss, and establish guidelines, as established by Copyright and Fair Use Guidelines, for use of personal and copyrighted media (e.g., images, music, video, content, language) in multimedia projects and presentations as a class/group. (5)

1.18 Recognize and use terms/concepts (e.g., IP address, Intranet, private networks, discussion forum, threaded discussion). (6)

1.19 Demonstrate knowledge of responsible, safe and Christian use of networked digital information (e.g., Internet, mobile phone, and wireless).  (6)

Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies.

Objectives:

2.01 Demonstrate knowledge of strategies for identifying and solving minor hardware and software problems. (1)

2.02 Enter/edit data and use spreadsheet features and functions to project outcomes and test simple “what if…” statements in content assignments. (3)

2.03 Use proper keyboarding techniques to improve accuracy, speed, and general efficiency in computer operation. (4)

2.04 Demonstrate knowledge and use of Word Processing features (e.g., columns, tables, headers/footers) to format and publish content projects/products. (4)

2.05 Use a variety of collaborative tools to survey, collect, and communicate information for content area assignments. (6)

Competency Goal 3: The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information.

Objectives:

- 3.01 Select and use appropriate technology tools to solve problems and make decisions in content areas. (1)
- 3.02 Select and use two or more criteria to organize, interpret, and display content data and explain strategies used. (2)
- 3.03 Modify/edit databases to organize, analyze, and interpret data, and to create reports (e.g., documents, multimedia project, webpages). (2)
- 3.04 Evaluate and use database data and reports to solve problems and make decisions in content areas. (2)
- 3.05 Modify/create spreadsheets and graphs/charts to analyze and interpret data for content assignments. (3)
- 3.06 Create/modify spreadsheets to test simple “what if…” statements to solve problems and make decisions in content areas. (3)
- 3.07 Demonstrate use of Word Processing features/functions to design, format, layout, and publish assignments. (4)
- 3.08 Plan, design, and develop a multimedia product using data (e.g., graphs, charts, database reports) to present content information in the most effective way, citing sources. (5)
- 3.09 Create/modify and use rubrics to evaluate multimedia presentations for elements (e.g., organization, content, design, appropriateness for target audience, effectiveness, ethical use of resources). (5)
- 3.10 Select, evaluate, and use a variety of digital resources and information to research and present findings about Eastern Hemisphere: Africa, Asia, and Australia. (6)
- 3.11 Use evaluation tools to select Internet resources and information for content and usefulness in content area assignments. (6)

GRADE 8
Focus Areas

- Responsible and safe use of online resources
- Using Copyright and Fair Use Guidelines
- Using spreadsheets and databases relevant to classroom assignments
- Choosing charts/tables or graphs to best represent data
- Conducting online research and evaluating the information found
- Using word processing/desktop publishing for classroom assignments/projects
- Selecting and using a variety of technological tools to develop projects in content areas

Strands: 1= Societal Issues; 2 = Database; 3 = Spreadsheet; 4= Keyboard Utilization/Word Processing/Desktop Publishing; 5 = Multimedia/Presentation; 6 = Telecommunications/Internet; number in parentheses after each objective below indicates the strand under which it falls.

Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit Christian behavior in the use of computer and other technologies.

Objectives:

- 1.01 Demonstrate, discuss, and visually represent knowledge of changes in information technologies and the effect those changes have on North Carolina and society. (1)
- 1.02 Use technology terms/concepts to describe and explain strategies used to collect, organize, and present findings for assignments/projects. (1)



1.03 Model responsible, safe and Christian behavior relating to security, privacy, passwords, and personal information, and recognize possible consequences of misuse. (1)

1.04 Recognize and discuss how Copyright Laws protect ownership of intellectual property and identify and discuss consequences of misuse. (1)

1.05 Demonstrate knowledge of and explain how databases are used in an information-intensive society. (2)

1.06 Use knowledge of database terms/concepts, functions, and operations to explain strategies used to organize, analyze, and report information in content area assignments. (2)

1.07 Cite sources of information used in content area databases. (2)

1.08 Recognize, discuss, and investigate how spreadsheets in a variety of settings (e.g., schools, government, business, industry, transportation, communications). (3)

1.09 Use spreadsheet and graphing terms/concepts to present and explain content area assignments. (3)

1.10 Demonstrate knowledge of the advantages/disadvantages of using word processing to develop, publish, and present information to a variety of audiences. (4)

1.13 Review and use Word Processing terms/concepts to describe and explain how assignments/projects were designed. (4)

1.14 Demonstrate appropriate use of copyrighted materials in word processing documents used for content projects/assignments. (4)

1.15 Demonstrate knowledge of multimedia tools/concepts used by media (e.g., games, video, radio/TV broadcasts, websites) to entertain, sell and influence ideas and opinions. (5)

1.16 Use multimedia terms/concepts correctly to describe and explain projects/products. (5)

1.17 Recognize, discuss, and establish guidelines for use of personal and copyrighted media (e.g., images, music, video, content, language) in multimedia projects and presentations as a class/group. (5)

1.18 Recognize, discuss, and model correctly formatted citations for copyrighted materials and adhere to Copyright and Fair Use Guidelines for projects/assignments. (5)

1.19 Use appropriate terms/concepts to describe telecommunications tools and resources used to develop and complete assignments. (6)

1.20 Demonstrate knowledge of responsible, safe, and ethical use of networked digital information (e.g., Internet, mobile phone, and wireless). (6)

Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies.

Objectives:

2.01 Recognize and describe strategies for identifying, solving, and preventing minor hardware and software problems. (1)

2.02 Modify/design and use databases to organize, report, and display data. (2)

2.03 Select and use spreadsheet formulas and functions to solve problems in content areas. (3)

2.04 Use spreadsheet features/functions to calculate and present findings for content area assignments. (3)

2.05 Use proper keyboarding techniques to improve accuracy, speed, and general efficiency in computer operation. (4)

2.06 Select and justify use of appropriate collaborative tools to survey, collect, share, and communicate information in content areas. (6)

Competency Goal 3: The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information.

Objectives:

3.01 Select and use a variety of technology tools to collect, analyze, and present information. (1)

3.02 Select and use appropriate database features and functions to collect and organize information to solve problems in content areas and explain strategies used. (2)

3.03 Modify/design and use databases to analyze, interpret, and evaluate data and report findings. (2)

3.04 Design/modify spreadsheets to analyze and interpret information, test simple "what if..." statements, solve problems, and make decisions in content areas. (3)

3.05 Select and use Word Processing features/functions to develop, edit/revise, and publish documents/assignments. (4)

3.06 Develop and use rubrics to evaluate the quality of published documents/projects for content, design, and appropriate use of resources. (4)

3.07 Plan, design, and develop a multimedia product using data (e.g., graphs, charts, database reports) to present content information. (5)

3.08 Design/modify and use rubrics to evaluate multimedia presentations for content, design, appropriateness for target audience, and effective use of resources. (5)

3.09 Plan, select, evaluate, interpret and use a variety of digital resources to develop assignments/projects about North Carolina History. (6)

3.10 Use evaluation tools to select Internet resources and information for content and usefulness in content area assignments. (6)