

## Computer Fundamentals

| State Standard Number | State Standard Area/Description                                                                                                                                                                                    | Unit Name            | Course Topic Description                                              |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------------------------------------------------------------|
| 1.0                   | Students will utilize problem-solving processes through the use of resources to reach a desired outcome.                                                                                                           |                      |                                                                       |
| 1.12.1                | Analyze a variety of problem-solving approaches, which can be used and combined in seeking solutions.                                                                                                              | When all you have... | Section 2: Analyzing a Problem and Choosing the Right Tool; pg 1-9    |
| 1.12.2                | Develop and implement a design/problem-solving method based on a need or want.                                                                                                                                     | When all you have... | Section 2: Analyzing a Problem and Choosing the Right Tool; pg 1-9    |
| 2.0                   | Students use appropriate productivity tools including, but not limited to, word processing, spreadsheet, database, multimedia and telecommunications.                                                              |                      |                                                                       |
| 2.12.1                | Demonstrate advanced proficiency and accuracy in keyboarding skills.                                                                                                                                               | Documents            | Section 3: Creating a Document; pg 1-8                                |
| 2.12.2                | Create a multi-page document in conjunction with other tools that demonstrate the ability to type, format, edit, and print.                                                                                        | Documents            | Section 3: Creating a Document; pg 1-8                                |
| 2.12.3                | Create a database, define fields, enter data for multiple records, and print reports based on sort and query. Interpret report based on data.                                                                      |                      |                                                                       |
| 2.12.4                | Generate a spreadsheet including labels, values, formulas, and functions; create a chart to visually represent data. Analyze the significance of the data. Print a spreadsheet showing formulas.                   | Spreadsheets         | Section 4: Creating a Spreadsheet; pg 1-11                            |
| 2.12.5                | Create and present a multi-page, multimedia presentation incorporating three or more of the following: text, graphics, sound, animation, digital video or linking. Analyze and critique a multimedia presentation. | Presentations        | Section 3: Creating and Formatting a PowerPoint Presentation; pg 1-12 |
| 2.12.7                | Locate and evaluate sources of distance learning, telecommuting and teleconferencing and analyze the uses these electronic communications.                                                                         |                      |                                                                       |
| 3.0                   | Students use various technology tools to research information and evaluate its accuracy and appropriateness in order to solve problems and make decisions.                                                         |                      |                                                                       |
| 3.12.1                | Independently identify a research topic or state a problem that clearly identifies its elements, its scope, and the expected outcomes using technology tools.                                                      | The System           | Section 3: The Power of Search; pg 1-14                               |
| 3.12.2                | Generate a list of keywords for a research topic or problem with <b>qualifying modifiers</b> and conduct a search of electronic-based sources.                                                                     | The System           | Section 3: The Power of Search; pg 1-14                               |
| 3.12.3                | Utilizing different search strategies, conduct research using hyperlinks to select information for a specific topic or problem.                                                                                    | The System           | Section 3: The Power of Search; pg 1-14                               |
| 3.12.4                | Organize information logically for presentation or decision-making.                                                                                                                                                | When all you have... | Section 2: Analyzing a Problem and Choosing the Right Tool; pg 1-9    |

## Computer Fundamentals

| State Standard Number | State Standard Area/Description                                                                                                                                                                        | Unit Name            | Course Topic Description                                           |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------------------------------------------------------------------|
| 3.12.5                | Compare and contrast collected information to validate its reliability, authenticity, and timeliness.                                                                                                  | The System           | Section 3: The Power of Search; pg 1-14                            |
| 3.12.6                | Demonstrate the ability to document all sources using an accepted standard citation format.                                                                                                            | The System           | Section 3: The Power of Search; pg 1-14                            |
| 3.12.7                | Given a rubric, evaluate the research process and its outcome.                                                                                                                                         | The System           | Section 3: The Power of Search; pg 1-14                            |
| 4.0                   | Students will identify, apply concepts, and manage various tools and resources to evaluate their accuracy and appropriateness in solving problems and making decisions.                                |                      |                                                                    |
| 4.12.1                | Analyze how the development of new tools, materials, and processes is necessary to maintain and improve high productivity and quality.                                                                 | The System           | Section 2: Key Differences Between Windows, Mac, and Linux; pg 1-7 |
| 4.12.2                | Use tools to design and/or create solutions that are functional, aesthetically pleasing, demonstrate quality, and have value greater than the investment of time, energy, effort, and other resources. | When all you have... | Section 2: Analyzing a Problem and Choosing the Right Tool; pg 1-9 |
| 4.12.3                | Evaluate the available tools and select the appropriate tool and process that would safely accomplish the task.                                                                                        | When all you have... | Section 2: Analyzing a Problem and Choosing the Right Tool; pg 1-9 |
| 4.12.4                | Evaluate and then correct non-functioning technology system/subsystem, areas needed to accomplish required tasks.                                                                                      | The System           | Section 4: Solving Common Problems; pg 1-19                        |
| 5.0                   | Students will recognize that systems are made up of individual components and that each component affects the operation of the system and its relationship with other systems.                         |                      |                                                                    |
| 5.12.1                | Interpret the ways technological systems have evolved and will continue to evolve to satisfy human needs and desires.                                                                                  | The System           | Section 2: Key Differences Between Windows, Mac, and Linux; pg 1-7 |
| 5.12.2                | Demonstrate how systems are planned, organized, designed, built, and controlled.                                                                                                                       | The System           | Section 2: Key Differences Between Windows, Mac, and Linux; pg 1-7 |
| 5.12.3                | Evaluate systems <b>model(s)</b> including the stages of input, processes, output, <b>feedback</b> , and consequences.                                                                                 | The System           | Section 4: Solving Common Problems; pg 1-19                        |
| 6.0                   | Students will evaluate the impact and ethical implications on individuals, society and the environment.                                                                                                |                      |                                                                    |
| 6.12.1                | Analyze the impact of new and improved products and services on the quality of life.                                                                                                                   | The System           | Section 2: Key Differences Between Windows, Mac, and Linux; pg 1-7 |
| 6.12.2                | Analyze how the effects of a given technology may be unacceptable under a certain set of circumstances, but acceptable under another set of circumstances.                                             | The System           | Section 5: Ethical Computer Use; pg 1-14                           |



## Computer Fundamentals

| State Standard Number | State Standard Area/Description                                                                                                                                             | Unit Name  | Course Topic Description                                           |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------------------------------------------------------|
| 6.12.3                | Research and select a career choice, develop a career plan, and select the courses/program for <b>entry-level skills</b> . (e.g. Career Information System)                 |            |                                                                    |
| 6.12.4                | Analyze significant events, inventions, and discoveries in the history of technology and their affects on beliefs, attitudes and behavior in business, society, or culture. | The System | Section 2: Key Differences Between Windows, Mac, and Linux; pg 1-7 |