

**Planned Course of Study**

**COMPUTER APPLICATIONS 10-12**

**Grades 10 - 12**

**Technology Department**

**Salisbury Township School District**

**1140 Salisbury Road**

**Allentown, PA 18103**

**COMPUTER APPLICATIONS**  
**Grades 10-12**  
**Half Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>Objective 1</p> <p>The student will be able to use graphics manipulation software:</p> <ol style="list-style-type: none"> <li>1. Using the drawing tools</li> <li>2. Modifying shapes</li> <li>3. Adding symbols</li> <li>4. Filling objects</li> <li>5. Changing the outline</li> <li>6. Creating and editing text</li> <li>7. Duplicating objects</li> <li>8. Rounding corners</li> <li>9. Skewing objects</li> <li>10. Transforming objects</li> <li>11. Grouping</li> <li>12. Layering objects</li> <li>13. Rotating a selection</li> <li>14. Scaling a selection</li> </ol>	<p>The student will follow instructions in teacher created tutorial assignments and complete self-paced practice assignments.</p>	<p>Satisfactory completion of assignments.</p>	<p>Science and Technology Standards 3.7.10</p> <p>Section D. Utilize Computer Software to Solve Specific Problems.</p> <p>Select and apply software designed to meet specific needs.</p> <p>Apply advanced graphic manipulation and desktop publishing techniques.</p>
<b>Resources/Materials</b>			

**COMPUTER APPLICATIONS**  
**Grades 10-12**  
**Half Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>Objective 2</p> <p>The student will be able to use desktop publishing software:</p> <ol style="list-style-type: none"> <li>1. Adding and editing text</li> <li>2. Changing text attributes</li> <li>3. Reversing text</li> <li>4. Setting tabs</li> <li>5. Applying indents</li> <li>6. Adding a drop cap</li> <li>7. Using bullets</li> <li>8. Applying styles</li> <li>9. Layering objects</li> <li>10. Placing graphics</li> <li>11. Wrapping text around graphics</li> <li>12. Rotating objects</li> <li>13. Inserting inline graphics</li> <li>14. Using master pages</li> <li>15. Creating and adding tables</li> </ol>	<p>The student will follow instructions in teacher created tutorial assignments and complete self-paced practice assignments.</p>	<p>Satisfactory completion of assignments.</p>	<p>Science and Technology Standards 3.7.10</p> <p>Section D. Utilize Computer Software to Solve Specific Problems.</p> <p>Select and apply software designed to meet specific needs.</p> <p>Apply advanced graphic manipulation and desktop publishing techniques.</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**COMPUTER APPLICATIONS**  
**Grades 10-12**  
**Half Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>Objective 3</p> <p>The student will be able to use presentation and multimedia software:</p> <ol style="list-style-type: none"> <li>1. Using the various drawing and painting tools</li> <li>2. Changing color and pattern</li> <li>3. Replacing colors</li> <li>4. Using the selection tools</li> <li>5. Using effects</li> <li>6. Adding cards</li> <li>7. Changing the background color</li> <li>8. Moving between cards</li> <li>9. Creating buttons</li> <li>10. Navigating with buttons</li> <li>11. Using transitions</li> <li>12. Copying cards</li> <li>13. Deleting a card</li> <li>14. Using the Storyboard Extra</li> <li>15. Importing a background</li> <li>16. Adding clip art</li> <li>17. Copying a background to a new card</li> <li>18. Sharing a background among cards</li> <li>19. Adding a graphic object</li> <li>20. Editing a graphic object</li> <li>21. Copying and pasting graphics</li> <li>22. Deleting graphics</li> <li>23. Moving graphics</li> <li>24. Painting text</li> <li>25. Editing painted text</li> <li>26. Adding a text object</li> <li>27. Editing a text object</li> <li>28. Changing the style of a text object</li> <li>29. Resizing a text object</li> <li>30. Changing a text object's attributes</li> <li>31. Deleting a text object</li> </ol>	<p>The student will follow instructions in teacher created tutorial assignments and complete self-paced practice assignments.</p>	<p>Satisfactory completion of assignments.</p>	<p>Science and Technology Standards 3.7.10</p> <p>Section D. Utilize Computer Software to Solve Specific Problems.</p> <p>Select and apply software designed to meet specific needs.</p> <p>Apply advanced graphic manipulation and desktop publishing techniques.</p> <p>Science and Technology Standards 3.7.12</p> <p>Section D. Evaluate the Effectiveness of Computer Software to Solve Specific Problems.</p> <p>Evaluate the effectiveness of the computer as a presentation tool.</p> <p>Design and apply advanced multimedia techniques.</p>

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
32. Editing text within a text object 33. Changing the style within a text object 34. Printing a text object 35. Playing a sound 36. Changing a button appearance or action 37. Using the Cookie Cutter effect 38. Using the Hide Show NBA 39. Using the Roll Credits NBA 40. Using the Ghostwriter NBA 41. Using an Automatic Timer 42. Using hypertext links 43. Using group cards 44. Changing the card's cursor 45. Changing the stack's cursor 46. Animating clip art 47. Creating a Cel animation 48. Using testing functions			

**COMPUTER APPLICATIONS**  
**Grades 10-12**  
**Half Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>Objective 4</p> <p>The student will be able to use 3D drawing and animation software:</p> <ol style="list-style-type: none"> <li>1. Adding 3D preset models</li> <li>2. Adding 3D text models</li> <li>3. Changing backdrops</li> <li>4. Adjusting lights and shadows</li> <li>5. Using cameras</li> <li>6. Animating</li> <li>7. Changing tools</li> <li>8. Changing inks</li> <li>9. Changing brush size</li> <li>10. Using key color</li> <li>11. Changing the palette</li> <li>12. Changing mini-palette</li> <li>13. Inserting a tween</li> <li>14. Moving with time</li> <li>15. Using time ink</li> <li>16. Using polymorphic tweening</li> <li>17. Using color cycling and cycle draw</li> <li>18. Titling</li> <li>19. Creating and applying a mask</li> <li>20. Using the spline and polygon path</li> <li>21. Applying transitions</li> </ol>	<p>The student will follow instructions in teacher created tutorial assignments and complete self-paced practice assignments.</p>	<p>Satisfactory completion of assignments.</p>	<p>Science and Technology Standards 3.7.10</p> <p>Section D. Utilize Computer Software to Solve Specific Problems.</p> <p>Select and apply software designed to meet specific needs.</p> <p>Apply advanced graphic manipulation and desktop publishing techniques.</p>
<b>Resources/Materials</b>			

**COMPUTER APPLICATIONS**  
**Grades 10-12**  
**Half Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>Objective 5</p> <p>The student will be able to install and troubleshoot hardware and software:</p> <ol style="list-style-type: none"> <li>1. Connecting computer components (system unit, monitor, keyboard)</li> <li>2. Installing printers</li> <li>3. Setting up screen resolution for monitor</li> <li>4. Installing Windows operating system on formatted hard drive</li> <li>5. Installing basic software</li> <li>6. Analyzing and solving basic operating system problems</li> <li>7. Analyzing and solving hardware and advanced software problems</li> </ol>	<p>The student will connect peripheral devices to the system unit.</p> <p>The student will install the Windows operating system and basic software.</p>	<p>The computer along with its peripherals and software should function normally.</p>	<p>Science and Technology Standards 3.7.10</p> <p>Section C. Apply Basic Computer Operations and Concepts.</p> <p>Demonstrate knowledge of hardware setup.</p> <p>Demonstrate the ability to perform basic software installation.</p> <p>Describe the process for basic software installation and demonstrate it.</p> <p>Identify solutions to basic hardware and software problems.</p> <p>Analyze and solve basic operating systems problems.</p> <p>Science and Technology Standards 3.7.12</p> <p>Section C. Evaluate Computer Operations and Concepts as to their Effectiveness to Solve Specific Problems.</p> <p>Describe and demonstrate a typical software installation.</p>

**COMPUTER APPLICATIONS**  
**Grades 10-12**  
**Half Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>Objective 6</p> <p>The student will be able to identify and explain the parts of a network, transfer files, and design and assess the effectiveness of a computer-based communications system.</p> <ol style="list-style-type: none"> <li>1. Identifying and explaining the function of the parts of a basic network</li> <li>2. Transferring files within and outside of a network</li> <li>3. Designing and assessing the effectiveness of a computer-based communications system.</li> <li>4. Transferring files between different computer platforms</li> <li>5. Solving connectivity problems</li> </ol>	<p>The student will follow instructions in teacher created tutorial assignments and complete self-paced practice assignments.</p>	<p>Satisfactory completion of assignments.</p>	<p>Science and Technology Standards 3.7.10</p> <p>Section E. Apply Basic Computer Communications Systems.</p> <p>Identify and explain the function of the parts of a basic network.</p> <p>Explain and demonstrate file transfer within and outside of a computer network.</p> <p>Science and Technology Standards 3.7.12</p> <p>Section E. Assess the Effectiveness of Computer Communication Systems.</p> <p>Assess the effectiveness of a computer based communications system.</p> <p>Transfer files among different computer platforms.</p> <p>Apply knowledge of protocol standards to solve connectivity problems.</p>

**COMPUTER APPLICATIONS**  
**Grades 10-12**  
**Half Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>Objective 7</p> <p>The student will be able to analyze the effectiveness of on-line information resources to meet the needs for collaboration, research, publications, communications and productivity.</p>	<p>The student will complete a research project.</p>	<p>Satisfactory completion of the research project.</p>	<p>Science and Technology Standards 3.7.12</p> <p>Section E. Assess the Effectiveness of Computer Communication Systems.</p> <p>Analyze the effectiveness of on-line information resources to meet the needs for collaboration, research, publications, communications and productivity.</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**COMPUTER APPLICATIONS**  
**Grades 10-12**  
**Half Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>Objective 8</p> <p>The student will be able to analyze and solve hardware and advanced software problems.</p> <ol style="list-style-type: none"> <li>1. Installing software and adjusting settings for a modem</li> <li>2. Installing software and adjusting settings for input devices</li> <li>3. Installing software and adjusting settings for output devices</li> </ol>	<p>The student will install software and adjust the settings for input and output devices.</p>	<p>The peripherals should function correctly.</p>	<p>Science and Technology Standards 3.7.12</p> <p>Section C. Evaluate Computer Operations and Concepts as to their Effectiveness to Solve Specific Problems.</p> <p>Analyze and solve hardware and advanced software problems.</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**COMPUTER APPLICATIONS**  
**Grades 10-12**  
**Half Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>Objective 9</p> <p>The student will be able to assess and use multiple input and output devices to create presentations.</p> <ol style="list-style-type: none"> <li>1. Using multiple input to create a presentation</li> <li>2. Using multiple output devices to display a presentation</li> </ol>	<p>The student will use pictures from a scanner or digital camera to create a presentation. The student will output the presentation to a VCR tape or CD.</p>	<p>Satisfactory completion of assignments.</p>	<p>Science and Technology Standards 3.7.12</p> <p>Section C. Evaluate Computer Operations and Concepts as to their Effectiveness to Solve Specific Problems.</p> <p>Assess and apply multiple input and output devices to solve specific problems.</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**COMPUTER APPLICATIONS**  
**Grades 10-12**  
**Half Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>Objective 10</p> <p>The student will be able to determine an appropriate software application to produce a desired output.</p>	<p>The student will follow instructions in teacher created tutorial assignments and complete self-paced practice assignments.</p> <p>“Create Your Own Business “ project includes business cards, inventory, posters and advertisement components.</p>	<p>Satisfactory completion of assignments.</p>	<p>Science and Technology Standards 3.7.12</p> <p>Section D. Evaluate the Effectiveness of Computer Software to Solve Specific Problems.</p> <p>Evaluate the effectiveness of software to produce an output and demonstrate the process.</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**COMPUTER APPLICATIONS**  
**Grades 10-12**  
**Half Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>Objective 11</p> <p>The student will be able to analyze, select and apply the appropriate software to solve complex problems.</p>	<p>The student will be presented with various problems and will be asked to develop appropriate software solutions.</p>	<p>Satisfactory completion of assignments.</p>	<p>Science and Technology Standards 3.7.12</p> <p>Section D. Evaluate the Effectiveness of Computer Software to Solve Specific Problems</p> <p>Analyze, select and apply the appropriate software to solve complex problems.</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**COMPUTER APPLICATIONS**  
**Grades 10-12**  
**Half Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>Objective 12</p> <p>The student will be able to combine two or more software applications to produce an output.</p> <ol style="list-style-type: none"> <li>1. Scanning pictures to be used in a publication</li> <li>2. Using pictures from a digital camera in a presentation</li> <li>3. Understanding of various file formats</li> <li>4. Converting file formats using graphic manipulation software</li> <li>5. Use graphics created with graphic manipulation software in a desktop published document</li> <li>6. Use graphics created with graphic manipulation software in a multimedia presentation</li> </ol>	<p>The student will:</p> <ul style="list-style-type: none"> <li>• scan pictures</li> <li>• download pictures from a digital camera</li> <li>• use graphic manipulation software to convert to the necessary file format</li> <li>• use the graphics in a desktop publishing document and a multimedia presentation</li> </ul>	<p>Satisfactory completion of the desktop publishing document and multimedia presentation.</p>	<p>Science and Technology Standards 3.7.10</p> <p>Section D. Utilize Computer Software to Solve Specific Problems.</p> <p>Describe and demonstrate how two or more software applications can be used to produce an output.</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			

**COMPUTER APPLICATIONS**  
**Grades 10-12**  
**Half Year**

<b>Learning Objectives/ Content</b>	<b>Teaching/Learning Activities</b>	<b>Evaluation Criteria</b>	<b>State Standard</b>
<p>Objective 13</p> <p>The student will be able to create a simple web page.</p> <ol style="list-style-type: none"> <li>1. Heading</li> <li>2. Enter text</li> <li>3. Format text (font color and style, header size...)</li> <li>4. Import clip art</li> <li>5. Graphics manipulation (move, resize, position...)</li> <li>6. Hyperlinks</li> </ol>	<p>The student will follow instructions in teacher created tutorial assignments and complete self-paced practice assignments.</p>	<p>Satisfactory completion of assignments.</p>	<p>Science and Technology Standards 3.7.10</p> <p>Section E. Apply Basic Computer Communications Systems.</p> <p>Describe and apply the components of a web page and their function.</p>
<b>Resources/Materials</b>			
<b>Additional Resources/Inter-disciplinary Relationships</b>			