

## Pine Hill Public Schools Curriculum

Content Area:	<b>Electives</b>		
Course Title/ Grade Level:	Technology in Action: Excel		
Unit 1:	<b>Basic functions of Excel</b>	Duration:	<b>8 Weeks</b>
Unit 2:	<b>How spreadsheets are useful and important tool</b>	Duration::	<b>8 Weeks</b>
BOE Approval Date:	August 26, 2014		

**Pine Hill Public Schools  
Curriculum**

<b>Unit Title:</b> Basic functions of Excel		<b>Unit #: One</b>
<b>Course or Grade Level:</b> Technology in Action:Excel		<b>Length of Time:</b> 8 Weeks
<b>Pacing</b>	Weeks 1-8	
<b>Essential Questions</b>	<ul style="list-style-type: none"> <li>• How can spreadsheets be used in business and in everyday life?</li> <li>• Why is it beneficial to use spreadsheets to organize, display, and analyze data?</li> <li>• How is data effectively communicated?</li> <li>• What are the benefits of using an Excel spreadsheet vs. a Word document?</li> <li>• What professions—business and otherwise—benefit from using Excel?</li> </ul>	
<b>Content</b>	<ul style="list-style-type: none"> <li>• Parts of the spreadsheet</li> <li>• Key terms related to spreadsheets</li> <li>• Formatting a spreadsheet</li> </ul>	
<b>Skills</b>	<ul style="list-style-type: none"> <li>• Define key spreadsheet terms</li> <li>• Create a spreadsheet utilizing proper formatting skills</li> <li>• Create formulas in a spreadsheet</li> <li>• Enhance a spreadsheet through bolding and /or italicizing data, borders, clipart, shading, and alignment of data</li> </ul>	
<b>Assessments</b>	<ul style="list-style-type: none"> <li>• Benchmark Assessment</li> <li>• Quizzes</li> <li>• Tests</li> <li>• Student and teacher created rubrics</li> <li>• Student Portfolio of Products</li> <li>• Alternative assessments (i.e. performance based, inquiry project)</li> </ul>	
<b>Interventions / differentiated instruction</b>	<ul style="list-style-type: none"> <li>• Extended time for completion of assignments or tests</li> <li>• Grouping</li> <li>• Shortened assignments</li> <li>• Assignment notebooks</li> <li>• Supplemental aids (vocabulary, summary cards, modern translation of original work, etc.)</li> <li>• Visual demonstrations</li> <li>• Presentation of material in small steps</li> <li>• Visual or multisensory materials</li> <li>• Functional level materials</li> <li>• Mnemonic aids/devices</li> <li>• Credit for class participation, effort and attendance</li> <li>• Modified tests</li> <li>• Tutoring assistance (peer, pal, teacher, etc.)</li> <li>• Emphasis on successes</li> <li>• Graphic Organizers</li> <li>• CITW strategies</li> <li>• Peer editing, think/pair/share, small group</li> <li>• Include strategies aimed at assisting English Language Learners</li> </ul>	

<b>Inter-disciplinary Connections</b>	<ul style="list-style-type: none"> <li>• History</li> <li>• Mathematics</li> <li>• Literacy</li> <li>• Science</li> <li>• Art</li> </ul>
<b>Lesson resources / Activities</b>	<ul style="list-style-type: none"> <li>• <u>Learning Microsoft Office 2010 Deluxe Edition</u></li> <li>• Teacher created assignments</li> <li>• Teacher website</li> </ul>

**Common Core Standards**

<p><b>Content Statement:</b></p> <p>The use of technology and digital tools requires knowledge and appropriate use of operations and related applications</p> <p>The ability to recognize a problem and apply critical thinking and problem-solving skills to solve the problem is a lifelong skill that develops over time.</p> <p>Gathering and evaluating knowledge and information from a variety of sources, including global perspectives, fosters creativity and innovative thinking.</p> <p>Leadership abilities develop over time through participation in groups and/or teams that are engaged in challenging or competitive activities.</p>	<p><b>Standard(s):</b></p> <p><b>8.1 Technology (STRAND A. TECHNOLOGY OPERATIONS AND CONCEPTS)</b>  8.1.12.A.1 Construct a spreadsheet, enter data, and use mathematical or logical functions to manipulate data, generate charts and graphs, and interpret the results</p> <p><b>9.1 21<sup>st</sup> Century Life and Careers (STRAND A CRITICAL THINKING &amp; PROBLEM SOLVING)</b>  9.1.12.A.1 Apply critical thinking and problem-solving strategies during structured learning experiences.</p> <p><b>(STRAND B CREATIVITY AND INNOVATION)</b>  9.1.12.B.1 Present resources and data in a format that effectively communicates the meaning of the data and its implications for solving problems, using multiple perspectives.  9.1.12.B.2 Create and respond to a feedback loop when problem solving.</p> <p><b>(STRAND C COLLABORATION, TEAMWORK, AND LEADERSHIP)</b>  9.1.12.C.5 Assume a leadership position by guiding the thinking of peers in a direction that leads to successful completion of a challenging task or project.</p>
--	--

**21<sup>st</sup> Century Themes**

X	Global Awareness	X	Financial, Economic, Business, and Entrepreneurial Literacy		Civic Literacy		Health Literacy
---	------------------	---	---	--	----------------	--	-----------------

**21<sup>st</sup> Century Skills**

X	Creativity and Innovation	X	Critical Thinking and Problem Solving	X	Communication and Collaboration	X	Information Literacy
---	---------------------------	---	---------------------------------------	---	---------------------------------	---	----------------------

	Media Literacy	X	ICT Literacy	X	Life and Career Skills
--	----------------	---	--------------	---	------------------------

**Pine Hill Public Schools  
Curriculum**

<b>Unit Title:</b> How spreadsheets are useful and important tools		<b>Unit #: Two</b>
<b>Course or Grade Level:</b> Technology in <b>Action:</b> Excel		<b>Length of Time:</b> 8 Weeks
<b>Pacing</b>	Weeks 9-16	
<b>Essential Questions</b>	<ul style="list-style-type: none"> <li>• How can the use of formulas increase productivity?</li> <li>• What functions are commonly used in Excel?</li> <li>• How do you determine what type of chart to use for various types of information?</li> <li>• How can charts and graphs be used to efficiently display data for school or business?</li> </ul>	
<b>Content</b>	<ul style="list-style-type: none"> <li>• Formulas</li> <li>• Functions</li> <li>• Charts</li> </ul>	
<b>Skills</b>	<ul style="list-style-type: none"> <li>• Creating formulas in a spreadsheet</li> <li>• Creating functions in a spreadsheet</li> <li>• Create pie, column, and bar charts</li> <li>• Create and enhance charts using various elements such as chart type and style, design, layout, labels, formats</li> </ul>	
<b>Assessments</b>	<ul style="list-style-type: none"> <li>• Benchmark Assessment</li> <li>• Quizzes</li> <li>• Tests</li> <li>• Student and teacher created rubrics</li> <li>• Student Portfolio of Products</li> <li>• Alternative assessments (i.e. performance based, inquiry project)</li> </ul>	
<b>Interventions / differentiated instruction</b>	<ul style="list-style-type: none"> <li>• Extended time for completion of assignments or tests</li> <li>• Grouping</li> <li>• Shortened assignments</li> <li>• Assignment notebooks</li> <li>• Supplemental aids (vocabulary, summary cards, modern translation of original work, etc.)</li> <li>• Visual demonstrations</li> <li>• Presentation of material in small steps</li> <li>• Visual or multisensory materials</li> <li>• Functional level materials</li> <li>• Mnemonic aids/devices</li> <li>• Credit for class participation, effort and attendance</li> <li>• Modified tests</li> <li>• Tutoring assistance (peer, pal, teacher, etc.)</li> <li>• Emphasis on successes</li> <li>• Graphic Organizers</li> <li>• CITW strategies</li> <li>• Peer editing, think/pair/share, small group</li> <li>• Include strategies aimed at assisting English Language Learners</li> </ul>	

<b>Inter-disciplinary Connections</b>	<ul style="list-style-type: none"> <li>• History</li> <li>• Mathematics</li> <li>• Literacy</li> </ul>
<b>Lesson resources / Activities</b>	<ul style="list-style-type: none"> <li>• <u>Learning Microsoft Office 2010 Deluxe Edition</u></li> <li>• Teacher created assignments</li> <li>• Teacher website</li> </ul>

**Common Core Standards**

<p><b>Content Statement:</b></p> <p>The use of technology and digital tools requires knowledge and appropriate use of operations and related applications</p> <p>The ability to recognize a problem and apply critical thinking and problem-solving skills to solve the problem is a lifelong skill that develops over time.</p> <p>Gathering and evaluating knowledge and information from a variety of sources, including global perspectives, fosters creativity and innovative thinking.</p> <p>Leadership abilities develop over time through participation in groups and/or teams that are engaged in challenging or competitive activities.</p>	<p><b>Standard(s):</b></p> <p><b>8.1 Technology (STRAND A. TECHNOLOGY OPERATIONS AND CONCEPTS)</b></p> <p>8.1.12.A.1 Construct a spreadsheet, enter data, and use mathematical or logical functions to manipulate data, generate charts and graphs, and interpret the results</p> <p><b>9.1 21<sup>st</sup> Century Life and Careers (STRAND A CRITICAL THINKING &amp; PROBLEM SOLVING)</b></p> <p>9.1.12.A.1 Apply critical thinking and problem-solving strategies during structured learning experiences.</p> <p><b>(STRAND B CREATIVITY AND INNOVATION)</b></p> <p>9.1.12.B.1 Present resources and data in a format that effectively communicates the meaning of the data and its implications for solving problems, using multiple perspectives.</p> <p>9.1.12.B.2 Create and respond to a feedback loop when problem solving.</p> <p><b>(STRAND C COLLABORATION, TEAMWORK, AND LEADERSHIP)</b></p> <p>9.1.12.C.5 Assume a leadership position by guiding the thinking of peers in a direction that leads to successful completion of a challenging task or project.</p>
--	--

**21<sup>st</sup> Century Themes**

X	Global Awareness	X	Financial, Economic, Business, and Entrepreneurial Literacy		Civic Literacy		Health Literacy
---	------------------	---	---	--	----------------	--	-----------------

**21<sup>st</sup> Century Skills**

X	Creativity and Innovation	X	Critical Thinking and Problem Solving	X	Communication and Collaboration	X	Information Literacy
	Media Literacy	X	ICT Literacy	X	Life and Career Skills		

