

# Blackhawk School District

## CURRICULUM

**Course Title:** Information Technology 1  
**Course Number:** 1060  
**Grade Level(s):** 10 – 12  
**Length of Period:** 45 minutes  
**Length of Course:** 1 semester  
**Faculty Author(s):** Cox  
**Credits:** .5  
**Date:** 1/19/09; Revised May '09

**COURSE DESCRIPTION:** The Information Technology I class is structured around the A+ certification exam. Students will study computer components, PC troubleshooting, and Microsoft Windows configuration and setup.

PA Standard	Description
<b>3.7.10.C</b>	Apply basic computer operations and concepts.
<b>3.7.10.D</b>	Utilize computer software to solve specific problems.
<b>3.7.10.E</b>	Apply basic computer communications systems.
<b>3.7.12.C</b>	Evaluate computer operations and concepts as to their effectiveness to solve specific problems.
<b>3.7.12.D</b>	Evaluate the effectiveness of computer software to solve specific problems.
<b>3.7.12.E</b>	Assess the effectiveness of computer communications systems.

Class Resources
All-in-One CompTIA A+ Certification Exam Guide by Mike Meyers
Sun xVM VirtualBox
Various Versions of Windows/Linux

Course Topic	Proposed Time	Topic Reflection
<b>Introduction to A+/Basic PC</b>	<b>7 Days</b>	
* A+ Certification Overview * A+ Exams * External PC Component Overview * Internal PC Component Overview * Component Identification		

<b>Course Topic</b>	<b>Proposed Time</b>	<b>Topic Reflection</b>
<b>Microprocessors</b>	<b>6 Days</b>	
<ul style="list-style-type: none"> <li>* Processor Functionality</li> <li>* Modern Processors</li> <li>* Processing and Wattage</li> <li>* Processor Identification</li> </ul>		

<b>Course Topic</b>	<b>Proposed Time</b>	<b>Topic Reflection</b>
<b>RAM/BIOS/CMOS</b>	<b>7 Days</b>	
<ul style="list-style-type: none"> <li>* Types of RAM</li> <li>* Troubleshooting RAM</li> <li>* Identification of RAM</li> <li>* Chipset Identification and Functionality</li> <li>* BIOS and CMOS Functionality and Configuration</li> <li>* POST Process and Device Drivers</li> <li>* Option ROM Configuration</li> </ul>		

<b>Course Topic</b>	<b>Proposed Time</b>	<b>Topic Reflection</b>
<b>Expansion Bus/Motherboards</b>	<b>8 Days</b>	
<ul style="list-style-type: none"> <li>* Expansion Bus Functionality</li> <li>* Decimal, Binary, and Hex Conversions</li> <li>* Interrupts</li> <li>* Installing Cards and Drivers</li> <li>* Motherboard Basics</li> <li>* Installing and Upgrading Motherboards</li> <li>* Removing and Installing Components</li> </ul>		

<b>Course Topic</b>	<b>Proposed Time</b>	<b>Topic Reflection</b>
<b>Power Supplies/Hard Drives</b>	<b>11 Days</b>	
<ul style="list-style-type: none"> <li>* Electricity and the PC</li> <li>* Installing and Troubleshooting Power Supplies</li> <li>* Hard Drive Architecture</li> <li>* ATA, SCSI, and RAID Technologies</li> <li>* Connecting and Troubleshooting Hard Drives</li> <li>* Hard Drive Partitioning and Formatting</li> <li>* Installing and Troubleshooting Hard Drives</li> </ul>		

<b>Course Topic</b>	<b>Proposed Time</b>	<b>Topic Reflection</b>
<b>Media/Operating Systems</b>	<b>9 Days</b>	
<ul style="list-style-type: none"> <li>* Floppy and Flash Drives</li> <li>* CD and DVDs</li> <li>* Removable Media Troubleshooting</li> <li>* Operating System Functionality</li> <li>* Installing and Upgrading Windows</li> <li>* Windows Interface</li> <li>* Windows Configurations</li> <li>* Windows File Systems</li> <li>* Software Evaluation</li> </ul>		

<b>Course Topic</b>	<b>Proposed Time</b>	<b>Topic Reflection</b>
<b>Windows/File Input and Output</b>	<b>8 Days</b>	
<ul style="list-style-type: none"> <li>* Command Line Interface</li> <li>* File Management</li> <li>* Optimizing and Maintaining Windows</li> <li>* Troubleshooting Windows</li> <li>* Common Input and Output Ports</li> <li>* Troubleshooting Input and Output Ports</li> <li>* Supporting Input and Output Devices</li> </ul>		

<b>Course Topic</b>	<b>Proposed Time</b>	<b>Topic Reflection</b>
<b>Sound and Video</b>	<b>8 Days</b>	
<ul style="list-style-type: none"> <li>* CRT and LCD Monitors</li> <li>* Video Cards</li> <li>* Video Software</li> <li>* Video Troubleshooting</li> <li>* PC Sound</li> <li>* PC Sound Troubleshooting</li> </ul>		

<b>Course Topic</b>	<b>Proposed Time</b>	<b>Topic Reflection</b>
<b>Portable Computing/Printers</b>	<b>7 Days</b>	
<ul style="list-style-type: none"> <li>* Portable Computing Devices</li> <li>* Managing and Maintaining Portable Devices</li> <li>* Printer Technologies</li> <li>* Laser Printer Technologies</li> <li>* Installing and Troubleshooting Printers</li> </ul>		

<b>Course Topic</b>	<b>Proposed Time</b>	<b>Topic Reflection</b>
<b>Internet/Security/Professionalism</b>	<b>9 Days</b>	
<ul style="list-style-type: none"><li>* <b>Internet Functionality</b></li><li>* <b>Internet Software Tools</b></li><li>* <b>Introduction to Network Security</b></li><li>* <b>Professionalism in Information Technology</b></li></ul>		