

MTCHS Technical Skills covered in Freshmen & Sophomore Tech

Freshmen Tech

- IC3
 - Computing Fundamentals
 - Computer hardware, i/o devices, troubleshooting, computer components
 - Computer software, software types, applications, installation/upgrades
 - Operating systems, file management, system settings, interfacing i/o devices
 - Virtual machines
 - Computer maintenance concepts
 - Living Online
 - Networks and the Internet
 - Email, netiquette
 - Web browsers, Internet searches, web information types and sources
 - Impact of computing and Internet on society
 - How computers are used in work, school, home
 - Risks and security of the Internet, legal uses, Internet safety
 - Intellectual property, copyrights, trademarks, patents
 - Key Applications
 - Program functions, applications, editing, formatting, printing
 - Word processing, documents, tables
 - Spreadsheets, modification, data and structure, sorting & manipulation, functions, charts, formulas
 - Presentation software, usage, creation, proper layout
- Media Arts/Web/Programming
 - HTML, WIX, CSS, HTML5
 - Photoshop
 - Alice
 - Students create websites
- Computer Science Concepts
 - Databases - Access
 - Problem solving
 - Data analysis
 - Programming in C applied to Virtual Robotics

Sophomore Tech

- Hardware & Electronics
 - Testout, A+
 - Breadboarding basics, schematics, simple electronics troubleshooting, using a multimeter
 - Parallax robotics, motors, sensors, Arduino, programming in C & PBasic
- Design & Development
 - HTML 5, CSS 3, Dreamweaver
 - Adobe Photoshop & Illustrator
 - WordPress
 - Basic Photography
 - Introduction to Graphic Design
 - JavaScript