

Wallenpaupack Area School District Planned Course Curriculum Guide

BCIT

A+ Certification Prep.

Course Description:

This course prepares students to successfully complete the CompTIA A+ Core 1 (Exam 220-1001) exam. Studies of basic computer hardware and operating systems will be supplemented by hands-on activities including but not limited to installing, repairing, troubleshooting, upgrading, configuring, and optimizing desktop and laptop computers. Preventative maintenance procedures, customer service concepts, and productive communication skills will be practiced.

Initial Creation Date (if applicable) and Revision Dates:

Revision Date – Spring 2024

Wallenpaupack Area School District Curriculum	
COURSE: A+ Certification prep	GRADE/S: 11/12
UNIT 1:	TIMEFRAME: 1 semester

PA COMMON CORE/NATIONAL STANDARDS:
 15.2.12.N 15.3.12.T 15.4.12.B 3.4.12.B2 3.4.12.B1 3.4.12.A1 3.4.12.A2 3.4.12.E1 3.4.12.E4 3.4.12.E6

- UNIT OBJECTIVES (SWBATS):**
- Install computer hardware
 - Test and repair computer hardware, software, and peripheral equipment
 - Make effective decisions conducive to a productive computer system
 - Prepare to successfully complete the A+ certification exam
 - Discover a pathway to a successful career in the IT industry

INSTRUCTIONAL STRATEGIES/ACTIVITIES:
 Hands-On labs & projects
 Recitation / Lecture
 Stage checks for CompTia A+ preparedness

ASSESSMENTS (Diagnostic/Benchmark/Formative/Summative):
 Exams / Quizzes
 Labs / projects

DIFFERENTIATED INSTRUCTION (Acceleration/Enrichment):

Instruction will focus on real-world content, activities, and common practices associated with IT careers. Students enrolled in this class will be required to complete tasks and meet standards required by IT careers associated with the coursework.

RESOURCES (Technology Based Resources, Text Resources, etc.):
 CompTIA (& associated resources)

KEY VOCABULARY:

Printers
 Scanners
 Gigabytes
 Kilobytes
 Spyware
 Backup
 Malware
 CD-Rom
 Megabyte
 Floppy Disk
 Personal Computer (PC)
 Flash Drive
 Folder
 Boot
 Cable
 Upload

Internet Service Provider
Audio
Computer Graphics
Buttons
Software
Terminal
Artificial Intelligence
Components
Programming
Programming Language
USB Port
ADSL
Viruses
Malicious Software
Mechanical Device
Storage
Monitor
Internet (World Wide Web)
CPU (Central Processing Unit)
Ram
Bug
Virus
Bytes
Mouse
Motherboard
Hard Disk
Web Browser
Hardware
Cache
E-mail (Electronic Mail)
Electronic Device
Bluetooth
Computer System
Computer Networks
Machine Language
Storage Device
Output Devices
Input Devices
Keyboard
Mouse
Monitor
CPU
GPU
RAM
Hard Drive
Motherboard
Graphics Card
Power Supply

Operating System
Software
Hardware
Peripheral
USB
Ethernet
Wi-Fi
Bluetooth
Firewall
Antivirus
Malware
Virus
Data
File
Folder
Browser
Internet
Website
Search Engine
Email
Spreadsheet
Word Processor
Presentation
Database
Cloud
Backup
Download
Upload
Memory
Cache
Multitasking
Algorithm
Code
Programming
Developer
Debugging
Compiler
Interpreter
Software Development
Web Development
App
User Interface
User Experience
Gaming
Virtual Reality
Augmented Reality
Artificial Intelligence
Machine Learning

Deep Learning
Robotics
Internet of Things (IoT)
Cybersecurity
Encryption
Authentication
Biometrics
Network
LAN (Local Area Network)
WAN (Wide Area Network)
Router
Modem
Server
Client
Cloud Computing
Data Center
Web Hosting
Domain Name
IP Address
HTML
CSS
JavaScript
Python
Java
C++
Ruby
SQL
Linux
Windows
macOS
Android
iOS
Microsoft Office
Adobe Creative Suite
Gaming Console
Virtual Machine
Data Analysis
Cyber Attack
Hacking
Software Update
Firmware
Troubleshooting
Pixel
Resolution
Mousepad
Joystick
Sound Card
Webcam

Microphone
Biometric Scanner
Firewall
Data Encryption
Cloud Storage
API (Application Programming Interface)
Debugger
Version Control
Server Rack
Command Line Interface (CLI)
VPN (Virtual Private Network)
Spam Filter
Data Backup
Data Recovery