Wallenpaupack Area School District
Planned Course Curriculum Guide

BCIT

Computer Technology 8

Course Description:
This class is an introductory computer class. The class is designed to instruct students with varying computer skills. This includes but is not limited to various Microsoft programs, career exploration, and an emphasis on coding with both block coding and text-based coding.

Initial Creation Date (if applicable) and Revision Dates:
Written 2/21/24.

Wallenpaupack Area School District Curriculum	
COURSE: Comp 8	**GRADE/S: 8th**
UNIT 1: Microsoft 365	**TIMEFRAME: 5 Days**

PA COMMON CORE/NATIONAL STANDARDS:

15.3.8.B- Produce a variety of business documents and reports; focus on content, style, and format.

15.3.8.E- Choose appropriate print and electronic resources to meet project needs.

15.4.8.D- Create projects using emerging input technologies.

15.4.8.G- Create an advanced digital project using appropriate software/application for an authentic task.

15.4.8.K- Create a multimedia project using student-created digital media.

UNIT OBJECTIVES (SWBATS):

- Students will be able to effectively use Microsoft OneDrive to save and organize their files.
- Students will be able to access school issued email and basic operations of email.
- Students will be able to effectively use Microsoft Word to create, format, and edit different types of documents.
- Students will be able to effectively use Microsoft Excel to create different types of spreadsheets for various uses.

INSTRUCTIONAL STRATEGIES/ACTIVITIES:

- Projects
- Video
- Presentations
- Internet Resources

ASSESSMENTS (Diagnostic/Benchmark/Formative/Summative):

- Projects
- Classwork

DIFFERENTIATED INSTRUCTION (Acceleration/Enrichment):

Appropriate accommodations based on the student's IEP/504 Plan and/or student ability.

RESOURCES (Technology Based Resources, Text Resources, etc.):

- Computers
- TV Display
- Internet
- Microsoft 365
    - Outlook
    - OneDrive
    - Word
    - Excel

KEY VOCABULARY: Microsoft, OneDrive, Word, PowerPoint, Excel, Tabs, Groups, Buttons, Ribbon, Status Bar, Quick Access Toolbar, Word Processing, Cut, Copy, Paste, Cells, Formatting, Spreadsheet, Columns, Rows, Tables, Charts, Formula, Data, Merge, Email

Wallenpaupack Area School District Curriculum	
COURSE: Comp 8	**GRADE/S: 8th**
UNIT 2: Coding	**TIMEFRAME: 15-18 days**

PA COMMON CORE/NATIONAL STANDARDS:

15.3.8.U Identify and employ various electronic communication options related to desired outcomes.

15.3.8.W Use electronic communication with peers and/or educators to produce a work product.

15.3.8.X Demonstrate effective techniques for good communication.

15.4.8.A Analyze the influence of emerging technologies on daily life.

15.4.8.H Explain the differences between a scripting language and a coding language.

15.4.8.I Solve a problem with an algorithm.

15.4.8.M Explore and describe how emerging technologies are used across different career paths.

3.4.8.E4 Describe how the design of the message is influenced by such factors as the intended audience, medium, purpose, and nature of the message.

UNIT OBJECTIVES (SWBATS):

Students will be able to demonstrate their understanding of block coding.
Students will be able to create their own authentic code.
Students will be able to successfully download code onto a circuit.
Students will be able to use problem solving skills to edit written code.
Students will be able to demonstrate their understanding of drones and their uses.
Students will be able to use both code and manual fight tools to navigate a drone.

INSTRUCTIONAL STRATEGIES/ACTIVITIES:

- Projects
- Guided Lessons
- Problem Solving
- Verbal Questions
- Hands on activities

ASSESSMENTS (Diagnostic/Benchmark/Formative/Summative):

- Projects
- Classwork
- Demonstration

DIFFERENTIATED INSTRUCTION (Acceleration/Enrichment):

Appropriate accommodations based on the student's IEP/504 Plan and/or student ability.

RESOURCES (Technology Based Resources, Text Resources, etc.):

- Computers

- Keyboard
- Internet
- Circuit Boards
    - Circuit Playground
    - LSC Speaker and Piano
- Websites
    - Code.org
    - Microsoft MakeCode
    - FTW Code
    - FTW Robotics
    - Scratch
    - Let's Start Coding
    - Microsoft 365
- Mambo Parrot Drones
- iPads
- Laptops
- Videos
- TV Display

KEY VOCABULARY:

Code, text-based code, code languages, block code, loop, circuit board, toolbox, simulator, workspace, drone, Airframe, motors, PCB (Printed Circuit Board), Body panels, propellers, prop guards (hulls), vertical up, vertical down, hover, roll, pitch, yaw, maneuvers, algorithm