Whitehall-Coplay School District Syllabus

Course Title: **Introduction to Computer Science** **Grade:** **9, 10, 11, 12**

DESCRIPTION OF COURSE: Computer Science and computational problem solving are fundamental skills for engaging the 21st-Century marketplace of ideas and economies. We believe that all students should have the opportunity to learn these skills as they will use them in whatever career they are likely to enter. Students will learn the language of python and have an introduction into the program creation as well as algorithmic process.

REQUIRED TOPICS OF STUDY	SUGGESTED INSTRUCTIONAL TIME	STANDARDS/ELIGIBLE CONTENT
Creating Drawings	3 Weeks (16 Days)	Unit 1 Standards: 3A-AP-139-10
Functions, Mouse Events, and Properties	2 Weeks (11 Days)	Unit 2 Standards: 3A-AP-199-10
Mouse Motion Events, Conditionals, and Helper Functions	3 Weeks (13 Days)	Unit 3 Standards: 3A-AP-239-10
More Conditionals, Key Events, and Methods	2 Weeks (12 Days)	Unit 4 Standards: 1B-AP-11
Complex Conditionals and More Key Events	2 Weeks (10 Days)	Unit 5 Standards: 2-AP-12
Groups, Step Events, and Motion	3 Weeks (15 Days)	Unit 6 Standards: 2-AP-17 Algorithms & Programming Communicating

RESOURCES: Curriculum, Resources and Materials by Carnegie Mellon University; Chromebooks; Finch Robots & Microchip Programming

Revised: 6/15/2021