

Elizabethtown Area School District: Scope & Sequence



Department: Computer Science (Mathematics)
Course: 270 Introduction to Python Programming
Grade Level(s): Grades 9-12

<i>Unit Title</i>	<i>General Topics/Course Modules</i>	<i>Pacing</i>
1. Programming Basics	1. Output and Variables 2. Overwriting and Concatenation 3. Number Types and Basic Math 4. More Math Functions 5. Integer Division	Marking Period 1 15 blocks
2. Style and Simple Decisions	6. Beautiful Code 7. Beautiful Programs 8. Conditional Statements (if) 9. Randomization	Marking Period 1 12 Blocks
3. Complex Decisions and Repetition	10. else/elif Statements 11. Sets of Conditions (and, or, xor) 12. The for loop 13. The while loop	Marking Period 1 12 Blocks
4. Lists and Strings	14. Lists (Basics) 15. Integrating Lists 16. Slicing and Substrings 17. String Manipulation 18. Cryptology	Marking Period 2 15 Blocks
5. Other Composite Structures	19. Tuples 20. Dictionaries (Basics) 21. Dictionary Subgroups and Iteration 22. Nesting in Dictionaries	Marking Period 2 15 Blocks
6. Projects and Events	A. Make-Time Project B. Coding Contest C. Final Game Project D. Topics in CS Mini-Projects	A. MP1 7-8 Blocks* B. MP2 3 Blocks C. MP2 7-10 Blocks* D. MP1 or MP2 2-5 Blocks* *Projects may overlap with lessons and accommodations can be made for students who move at different paces.