

Cornwall-Lebanon School District Curriculum Overview

High School- Computer Science Foundations 2

length of time in weeks	Concepts & Competencies	Common Assessments	Academic Standards (PA Core if applicable)
Unit 1 1	<p style="text-align: center;"><u>Review</u></p> <p>Student will be able to create a C console application that uses previously-learned concepts: strings, switch statements, if statements, while and for loops.</p>	<ul style="list-style-type: none"> ➤ Review Packet Completion ➤ Programming Projects Completion 	3A-A-3-10
Unit 2 2	<p style="text-align: center;"><u>One-Dimensional Arrays and Search Algorithms</u></p> <p>Student will be able to declare and initialize an integer array. Student will be able to use a for loop to access every element of an array. Student will be able to list differences and similarities between char and int arrays.</p>	<ul style="list-style-type: none"> ➤ Programming Projects Completion ➤ Unit 2 Test 	3A-A-4-9 3B-A-4-12
Unit 3 2	<p style="text-align: center;"><u>File Input/Output</u></p> <p>Student will be able to create a program that reads in data from an existing text file. Student will be able to create a program that produces data that is written to a new text file.</p>	<ul style="list-style-type: none"> ➤ Programming Projects Completion ➤ Functions Use Worksheets 	3A-N-3-34 3B-A-3-20
Unit 4 3	<p style="text-align: center;"><u>Functions</u></p> <p>Student will be able to define structured programming. Student will be able to create a program that uses functions appropriately. Student will be able to identify conditions in which function use is recommended.</p>	<ul style="list-style-type: none"> ➤ Programming Projects Completion 	3A-A-4-8 3B-A-5-7
Unit 5 2	<p style="text-align: center;"><u>Java Images</u></p> <p>Student will be able to demonstrate an understanding of pixels and resolution of digital images. Student will be able to use the Images library and for loops to capture pixel data from digital images. Student will be able to create a program that repetitively captures pixel data and uses basic mathematical operations to alter the pixel color value.</p>	<ul style="list-style-type: none"> ➤ Programming Projects Completion ➤ Unit 5 Quiz 	3A-C-5-14 3A-I-7-25 3B-A-5-8
Unit 6 3	<p style="text-align: center;"><u>Java OOP, Methods and Arrays</u></p> <p>Student will be able to define inheritance and demonstrate an understanding of key OOP concepts. Student will be able to</p>	<ul style="list-style-type: none"> ➤ Programming Projects Completion ➤ Unit 6 Test 	3A-A-4-8 3A-A-4-7

	write a basic Java class to represent a given object. Student will be able to create a Java applet that draws various polygons using Java arrays.		
Unit 7	<div style="border: 1px solid red; border-radius: 5px; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;">3</div> <p style="text-align: center;">Event-Driven Programming in Visual Basic</p> <p>Student will be able to identify key syntax differences between C, Java and VB. Student will be able to create a VB application that uses string arrays. Student will be able to create a VB application that uses sub procedures in an appropriate way.</p>	➤ Programming Projects Completion	3B-A-7-5 3B-A-5-7