

Computer Science A-AP - 2021-2022

At a Glance - Lamar CISD

Ongoing Skills Imbedded All Year	Professional Standards/Employability Skills/Technical Skills		
	Unit Name	Estimated Time Frame	TEKS
Grading Period 1 8/23-10/1 28 Days	Introductory Skills/ Set Up	4 Days	
	Unit 1: Primitive Types	8 Days	1.1, 1.2, 1.3, 1.4, 1.5
	1.1 Why Programming? Why Java? 1.2 Variables and Data Types 1.3 Expressions and Assignment Statements 1.4 Compound Assignment Operators 1.5 Casting and Ranges of Variables		
	Unit 2a and 2b: Using Objects	16 Days	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9
	2.1 Objects: Instances of Classes 2.2 Creating and Storing Objects (Instantiation) 2.3 Calling a void method 2.4 Calling a Void Method with Parameters 2.5 Calling a Non-void Method 2.6 String Objects: Concatenation, Literals and More 2.7 String Methods 2.8 Wrapper Classes: Integer and Double 2.9 Using the Math Class		
Grading Period 2 10/4-11/5 25 Days	Unit 3: Boolean Expressions and If Statements	12 Days	3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7
	3.1 Boolean Expressions 3.2 If Statements and control flow 3.3 If-else Statements 3.4 else If Statements 3.5 Compound Boolean expressions 3.6 Equivalent Boolean Expressions 3.7 Comparing Objects		
	Unit 4: Iteration	13 Days	4.1, 4.2, 4.3, 4.4, 4.5
4.1 While loops 4.2 For loops 4.3 Developing Algorithms Using Strings 4.4 Nested Iteration 4.5 Informal Code Analysis			
Grading Period 3 11/8-12/17 25 Days	Unit 5a and 5b: Writing Classes	25 Days	5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9, 5.10
	5.1 Anatomy of a Class 5.2 Constructors 5.3 Documentation with comments 5.4 Accessor Methods 5.5 Mutator Methods 5.6 Writing Methods 5.7 Static Variables and Methods 5.8 Scope and Access 5.9 This keyword 5.10 Ethical and Social Implications of Computing Systems		

Grading Period 4 1/4-2/18 33 Days	Unit 6: Array	11 Days	6.1, 6.2, 6.3, 6.4
	6.1 Array creation and access 6.2 Traversing arrays 6.3 Enhanced for loop for arrays 6.4 Developing algorithms using arrays		
	Unit 7: ArrayList	12 Days	7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7
	7.1 Introduction to ArrayList 7.2 ArrayList Methods 7.3 Traversing ArrayLists 7.4 Developing Algorithms Using ArrayLists 7.5 Searching 7.6 Sorting 7.7 Ethical Issues around Data Collection		
	Unit 8: 2D Array	10 Days	8.1, 8.2
8.1 2D Arrays 8.2 Traversing 2D Arrays			
Grading Period 5 2/21-4/14 34 Days	Unit 9: Inheritance	17 Days	9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7
	9.1 Creating superclasses and subclasses 9.2 Writing Constructors for Subclasses 9.3 Overriding Methods 9.4 Super Keyword 9.5 Creating references using inheritance hierarchies 9.6 Polymorphism 9.7 Object superclasses		
	Unit 10: Recursion	17 Days	10.1, 10.2
	10.1 Recursion 10.2 recursive searching and sorting		
Grading Period 6 4/19-5/26 28 Days	Test Prep	20 Days	
	See all of the TEKS above		
	Enrichment Topics	8 Days	