Middle School iOS App Development Scope & Sequence

Grading Period	Unit Title	Learning Targets
First Grading Period	Print Statements and Strings	● Introduction to Coding and Algorithms ● print() functions ● Vocab: playgrounds, output, function, console ● Double quotes " " ● Concatenation (+) ● Escape Characters (for single quotes, backslash, and tabs) ● Storing values (let vs var, the assignment operator =) ● Multi-Literal Strings ● Changing var values (the assignment operator =) ● Comments (\\ vs * *\) ● readLine() function (MAC OS console apps only) ● Interpolation
	Data Types and Basic Math Functions	● Data Types ● Int, Double, Bool, String ● How to store in all data types and what to store ● Type Inference ● Type Safety ● Basic math operators (+,-,*, \) using Int and Double ● Modulus function (%) and how it works with Int and Double
	Operations and Type Casting	● Compound assignments (+=, -=, *=, \=, %=) ● Order of operations ● Numeric Type Conversion ● Type Casting ● Random Numbers (arc4random_uniform(x))

		● Optionals (wrapping & unwrapping) ● Creating their 1st app xCode project, labels, textFields, button, linking, compile, run, debugging ● Setting and Getting Text Field data
Second Grading Period	If statements	● Defining If statements ● Multiple If statements ● Relationals (==, >, < >=, <=, !=) ● If statements with different data types ● If statements within return type functions ● .count variable ● Nested If statements
	If else if statements Switch statements	● If else if statements ● Logical Operators (|| , &, !) ● ASCII values ● Analyzing an ASCII chart ● Switch

	Loops
	Functions
		● For loops
		   ○ Parts
		   ○ Uses
		   ○ In return types
		● While loops
		   ○ Vs For loops
		   ○ Uses
		● Loops with if statements
		● Break
		● Writing functions without parameters
		● Writing functions with parameters
		● Loops in functions
		● Loops with relationals and compound assignments

	Arrays	- Building arrays - Finding the index - Appending - Appending multiple values - Using .count with Arrays - More functions with Arrays (.isEmpty, .remove(at:x), .removeLast(), .removeAll()