Intro to App Design (CS 1-2)
Scope & Sequence: Year 1

Semester 1		Semester 2	
Quarter 1	**Quarter 2**	**Quarter 3**	**Quarter 4**
Technical Standards: 4, 5, 8, Professional Standards: 1, 2 Unit 1 **Introduction to Swift Playgrounds** • Computer and iPad use and expectations. • Basic coding concepts through Playgrounds. • Introduction to Xcode Playgrounds. • Project: All About Me App Technical Standards: 1, 4, 5, 7, 8, 13 Professional Standards: 3, 5, 7 Unit 2 **Coding Concepts and Syntax** • Naming and identifiers • Strings • Functions • Constants and Variables • Loops • Integers/Doubles • Printing • Debugging • Dictionaries/Arrays • 'If' Statements • Project: Boogie Bot Unit P1 **Professional 1:** Create support team, assign members roles and tasks.	Technical Standards: 4, 5, 6, 7, 8 Professional Standards: 1, 2, 3, 5, Unit 3 **Introduction to Xcode** • Types • Parameters and Variables • Booleans • Conditional Statements • Remainder operators • Instance Methods and Properties • Project: Question Bot Technical Standards: 4, 5, 6, 7, 8, 13, 18, 19 Professional Standards: 4, 6, 7, Unit 4 **Basic App Functionality** • Overview of Xcode library functions • Practice with operational buttons • Segmented Controls • Sliders • Switches • Image viewer • Navigation development • Project: Multi-Page App Unit P2 **Professional 2:** Research career opportunities within App Development.	Technical Standards: 1, 2, 3, 11, 12, 13 Professional Standards: 1, 2, 7, 8, 9 Unit 5 **Prototyping** • Overview of Keynote Prototyping • Keynote • UI Elements • SF Symbols • Human Interface Guidelines • Design process and stages • Project: Functional keynote prototype Technical Standards: 9, 15, 18, 19 Professional Standards: 1, 3, 5 Unit 6 **Structures and Methods** • Structures • Methods • Properties • Actions and Outlets • Constraints • Stack View • Enumerations • Projects: Question Bot 2, Color Picker App Unit P3 **Professional 3:** Create resume.	Technical Standards: 11, 14, 15, 18, 19 Professional Standards: 7, 8, 9 Unit 7 **App Development** • Application of skills learned in previous units • Project: Rock, Paper, Scissors App OR Meme Maker App Technical Standards: 1, 2, 3, 9, 10, 16 Professional Standards: 2, 3, 4, 5, 8, 9 Unit 8 **Final Project** • Individual App Design • Prototyping • Build and Test Unit P4 **Professional 4:** Use collaborative teams to assist in app development process.

51% of the entire program will be conducted in a lab setting. The lab consists of hand-on learning projects and experiences where student will practice the necessary skills to complete the current unit study.