

Appendix C - Pacing Guide

1 semester course

Almost 12 Weeks:

Time	Pencil Code Topic	Programming Concept	Examples / Comments etc.
3 days	Basic Blocks: Move, Art, Text, Images	Sequencing	Chapter 2,3
2 days	Blocks revisited: Sound, Text, Controls	Input / Output	Chapter 3 Sample programs (2) Spiral Program: Beginnings of a QuestionBot.
5 days	Operators, Controls	Iterations	Battery of programs Spiral Program: QuestionBot
2 days	Transitioning to text-mode (CoffeeScript)	Iterations	Practice tracing loops Battery of programs
3 days	Operators	Functions	Battery of programs Spiral Program: QuestionBot Creation of pieces of scenes. Chapter 5 <i>(One large program)</i>
3 days	CoffeeScript programming	Iterative Development process	Design a scene. <i>(Use the Middlebury College course on Pencil Code for ideas.)</i> Chapter 5
5 days	Control (CoffeeScript)	Conditionals	Battery of Programs (Chapter 6) Spiral Program: Questionbot Complete.

Time	Pencil Code Topic	Programming Concept	Examples / Comments etc.
5 days	HTML – CSS	Building a website	Build a simple page using HTML blocks in Pencil Code. Chapter 11
3 days	JavaScript programming	Iterative Development process	Design a complex pattern. Or Design a Scene lab Chapter 7, 5
5 days	Block – text mode (JavaScript)	Arrays & Nested Loops	Battery of simple programs – Chapter 8 Hi Lo – Chapter 6 (Code in JavaScript)
5 days	HTML- CSS – Block language based program	Embedding a program in a HTML file	Build a website (multiple pages) with embedded JavaScript program. Chapter 11
3 days	Text mode (JavaScript)	A light introduction to Recursion	Chapter 10 A battery of 3 programs.
5 days	Block – text mode	Use of JQuery	Chapter 12
5 days	Large Project	Putting it all together. (No use of HTML)	Complex Patterns, ASCII Art
5 days	Open-ended partner project	Putting it all together (Use of HTML)	Art / Music / Stories