Suggested Pacing Guide

This is a suggested pacing guide to use with the High School Introduction to Computer Science in Python course (see course curriculum guide here).

This suggested pacing guide is for a year-long course that spans approximately 150 hours over ~32 weeks and assumes the following about the duration of lessons, projects, unit assessments, and midterm and final exams:

- Each lesson takes approximately 60-90 minutes
- Each unit assessment takes approximately 60 minutes
- Each project (Mini projects 1 and 2, and the final project) takes approximately 8-10 hours
- The midterm and final exam each take approximately 2 hours.

Due to the fact that different classrooms can be of varying durations, have a different number of classes per week, and different students move at different paces, this pacing guide may need to be modified accordingly.

We have intentionally left buffer room in case some lessons take longer than expected. This is why the suggested pacing guide is over 32 weeks even though most school years are a bit longer than that.

Please do not hesitate to email us at support@kira-learning.com if you have any questions or run into any issues as you are teaching this course.

Week 1	Unit 1 Lesson 1: The Beginning of your CS Journey
	Unit 1 Lesson 2: Communicating with a Computer
Week 2	Unit 1 Lesson 3: Data Types
	Unit 1 Lesson 4: Variables

Week 3	Unit 1 Lesson 5: Bugs & Debugging
	Unit 1 Lesson 6: Input & Output
Week 4	Unit 1 Assessment
	Unit 2 Lesson 1: If Statements & Operators
Week 5	Unit 2 Lesson 2: Decision Trees & Flowcharts
	Unit 2 Lesson 3: Elif Statements
Week 6	Unit 2 Lesson 4: Nested if Statements
	Unit 2 Lesson 5: While Loops Introduction
Week 7	Unit 2 Assessment
	Kernel of Curiosity 1: Lesson 1 - Binary Numbers
	Kernel of Curiosity 1: Lesson 2 - Data Compression
Week 8	Unit 3 Lesson 1: Fun with Functions
	Unit 3 Lesson 2: Functions that Return a Value
Week 9	Unit 3 Lesson 3: Built-in Functions
	Unit 3 Lesson 4: Using Modules & Libraries
Week 10	Unit 3 Assessment
	Start Mini Project 1: Sticks Game
Week 11	Finish Mini Project 1: Sticks Game
	Recommended time for further review + practice
Week 12	Unit 4 Lesson 1: Creating Lists
	Unit 4 Lesson 2: Indexing and Changing Elements in Lists
Week 13	Unit 4 Lesson 3: Adding and Removing List Elements

	Unit 4 Lesson 4: Nested Lists and Tuples
Week 14	Unit 4 Assessment
	Unit 5 Lesson 1: While Loops
Week 15	Unit 5 Lesson 2: For Loops
	Unit 5 Lesson 3: Looping over Strings & Lists
Week 16	Unit 5 Lesson 4: Nested Lists
	Unit 5 Lesson 5: Loops for Data Scientists
Week 17	Unit 5 Assessment
	Kernel of Curiosity 2: Lesson 1 - Complexity
	Kernel of Curiosity 2: Lesson 2 - Undecidable Problems
Week 18	Review for Midterm Exam
	Midterm Exam
Week 19	Unit 6 Lesson 1: Creating Dictionaries
	Unit 6 Lesson 2: Adding and Removing from Dictionaries
Week 20	Unit 6 Lesson 4: Complex Data Structures and Loops
	Unit 6 Assessment
Week 21	Kernel of Curiosity 3: Lesson 1 - The Internet
	Kernel of Curiosity 3: Lesson 2 - Network Routing and Security
	Start Mini Project 2: Wikipedia, the Album!
Week 22	Finish Mini Project 2: Wikipedia, the Album!
	Recommended time for further review + practice

Week 23	Kernel of Curiosity 4: Lesson 1 - Ownership & Intellectual Property
	Kernel of Curiosity 4: Lesson 2 - Privacy Concerns
	Kernel of Curiosity 4: Lesson 3 - Encryption
Week 24	Unit 7 Lesson 1: Creating Classes
	Unit 7 Lesson 2: Class Methods
Week 24	Unit 7 Assessment
	Unit 8 Lesson 1: Data Analysis Life Cycle
Week 25	Unit 8 Lesson 2: Exploring Data with Pandas
	Unit 8 Lesson 3: Cleaning Data
Week 26	Unit 8 Lesson 4: Analyzing Data
	Unit 8 Assessment
Week 27	Unit 9 Lesson 1: Types of Data Visualization
	Unit 9 Lesson 2: Bar Graphs
Week 28	Unit 9 Lesson 3: Line Plots and Scatter Plots
	Unit 9 Lesson 4: Putting it all Together
Week 29	Unit 9 Assessment:
	Kernel of Curiosity 5: Lesson 1 - Distributed Systems
Week 30	Kernel of Curiosity 5: Lesson 2 - Distributed People Together
	Start Final Project: The Movie Prediction Machine
Week 31	Finish Final Project: The Movie Prediction Machine

	Recommended time for review and practice for Final
Week 32	Final Exam