USACO 1 Syllabus

This course provides a basic introduction of data structure and programming principles, using various examples and practice questions to teach students a more systematic way to solve problems.

By the end of this course, students will have an understanding of algorithm principles and be able to solve basic questions using code. The objectives of this course include: 1. Be familiar with array and the standard library functions. 2. Understand how to take in inputs and format outputs using I/O and function parameters. 3. Be able to write algorithms to solve problems.

We use a diagnostic-test styled form of training for this curriculum by having students take assessments before we dive deeper, in order to best determine their weak points and to ensure that most of the time is spent on practicing.

We break down the class structure as follows:

Module	Topic
0	Python Crash Course
1	Functions
2	IO
3	Modulo & Math
4	Arrays
5	Strings
6	Practice Questions