

CFISD Computer Science I K Scope and Sequence

Course Description:

Computer Science I K is an introduction to the automated processing of information, including computer programming. This course gives students the conceptual background necessary to understand and construct programs, including the ability to specify computations, understand evaluation models, and utilize major constructs such as functions and procedures, data storage, conditionals, and looping. At the end of this course, students should be able to read and write small programs in the language of Java in response to a given problem or scenario, preparing them to continue on to Computer Science II K. (1 credit)

- Grades 9 – 12
- Required prerequisite: Algebra I
- Lab supplies or fee may be required.

TEKS

Cluster: STEM / Information Technology

Endorsement: STEM / Business & Industry

- Meets advanced course requirement (Y/N): N
- Meets foundation requirement for math, science, fine arts, English, LOTE (Y/N-area): Yes –LOTE

Industry Certification/Credentials: prerequisite for Computer Science II AP A exam for college credit

Instructional Units	Pacing
History/Ethics Programming Basics Variables Conditionals Strings Loops Methods/Arguments/Parameters Lists Arrays Classes OOP End of year project that encompasses all skills	1 st Semester - Python 2 nd Semester - Java

Primary Languages (used districtwide):

Python and Java

Supplemental Programming Environments:

Scratch, Jeroo , or Greenfoot