



CodeHS

Introduction to Computer Science in Python (Rainforest) ISTE Standards Alignment Overview

The CodeHS Introduction to Computer Science in Python curriculum teaches the foundations of computer science and basic programming, with an emphasis on helping students develop logical thinking and problem solving skills. This document is an overview of how the Introduction to Computer Science in Python course aligns with the International Society for Technology Education (ISTE) Standards.

CSTA K-12 Computer Science Standards Concepts

Empowered Learner

Empowered learning is a core focus in the Introduction to Computer Science with Python course as students engage in a multitude of learning goals and outcomes. Students with with a diversity of project types that empower students to take control of their learning clear learning objectives.

- Standards: 1c, 1d

Knowledge Constructor

Students use various libraries and tools, including Tracy the Turtle Graphics, to create programs and applications. They use the Internet to curate a variety of resources for learning. Students consider how their programs could be applied to different applications and uses.

- Standards: 3c, 3d

Innovative Designer

Students engage in design thinking practices to use a variety of technologies and libraries to share their ideas in a meaningful way. The course encourages creative thinking and problem solving to create meaningful solutions. Students focus on the cyclical process of developing, testing, and refining prototypes.

- Standards: 4a, 4b, 4c

Computational Thinker

Students use data structures, variables, control flow, and other topics in computer science to solve problems in creative and unique ways. By relying on strategic program design, students break down complex problems into manageable components and incorporate data analysis into their program design.

- Standards: 5a, 5b, 5c, 5d

Creative Communicator

The graphics component of the computer science course enables students to express themselves and solve problems in a creative and complex manner. By creating interesting solutions both with graphics and clever organized coding structure, students can effectively communicate complex ideas.

- Standards: 6a, 6b, 6c, 6d

Global Collaborator

The Introduction to Computer Science course utilizes a number of libraries and digital media tools and encourages collaborative processes to design solutions and employ critical thinking. Students publish original programs and designs with their peers and CodeHS community.

- Standards: 7a, 7b