CodeHS

AP Computer Science Principles ISTE Standards Alignment Overview

The CodeHS AP Computer Science Principles (AP CSP) 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 AP CSP 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 AP CSP 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: 1a, 1b, 1c, 1d

Digital Citizen

Computing has had significant impacts in many fields and in students' personal lives. In this course, students learn about the positive and negative impacts the computing and the Internet has had and learn to recognize the rights and responsibilities of living, learning, and working in an interconnected digital world. Students learn about privacy and ways to manage their personal information on an interconnected platform and learn about the right and obligations of using and sharing intellectual and digital property.

- Standards: 2a, 2b, 2c, 2d

Knowledge Constructor

Students use various libraries, languages, and tools 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: 3a, 3b, 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, 4d

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 web design and graphics component of the computer science course enables students to express themselves and 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 AP CSP 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, 7c, 7d