

Computer Science A

Mehlville School District

STEM

Grades 10 - 12, Duration 1 Year, 1 Credit

Rationale

It is imperative to increase our national talent pool in computer science and software engineering. The student will build interest and engage in computer science, preparing them for great career opportunities that require computational thinking.

Course Description

CSA focuses on integrating technologies across multiple platforms and networks, including the Internet. The student collaborates to produce programs that integrate mobile devices and leverage those devices for distribution collection and data processing. Students analyze, adapt and improve each other's programs while working primarily in Java and other industry-standard tools. This course prepares students for the College Board's Advanced Placement CS-A exam.

Prerequisites

Computer Science and Software Engineering with a "C" or higher

Course Objectives

1. The student will read and modify code provided from other sources and create original code. (A+ Reading)
2. The student will research career paths tied to computing. (A+ Research)
3. The student will prepare a presentation that demonstrates their understanding of the mobile devices as a set of computers. (A+ Speaking)
4. The student will create a report that identifies problems and questions that can be addressed to improve programs with industry-standard tools. (A+ Writing)

BOE 11/10/16