AP Computer Science Principles (AP CSP) - 2025-2026

Course Description:

https://apstudents.collegeboard.org/courses/ap-computer-science-principles

AP Computer Science Principles introduces students to the breadth of the field of computer science. In this course, students will learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They will incorporate abstraction into programs and use data to discover new knowledge. Students will also explain how computing innovations and computing systems, including the Internet, work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical.

To succeed in this course, students should demonstrate:

- **Responsible Computing:** Contribute to an inclusive, safe, collaborative, and ethical computing culture

- **Attention to Detail:** Writing and debugging code requires precision and careful analysis of errors.

- **Time Management**: completing independent assignments, projects, and readings on schedule.

- **Mathematical Reasoning:** Comfort with basic algebra and logical thinking for understanding algorithms and code flow.

The Computer Science A course includes over 160 hours of hands-on, structured lab experiences to engage students in individual or group problem solving. Thus, it includes a substantial lab component in which students design solutions to problems, express their solutions precisely (e.g., in the Java programming language), test their solutions, identify and correct errors, and compare possible solutions.

AP Exam Description and Sample Questions

Java Programming Certification alignment

Optional Resources to review this summer:

Visual Studio Code IDE Download	Java Beginner by Coding with John
Code.org's AP CS A Course	Full Java Course by Alex Lee
Book - Blown to Bits	Full Java Course by Bro Code