



AP Computer Science Principles

Course Description:

AP Computer Science Principles is an introductory college-level computing course that introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. It is a rigorous, engaging, and approachable course that explores many of the foundational ideas of computing, so all students understand how these concepts are transforming the world we live in. Topics covered in APCS Principles include how the Internet works, the sending and receiving of digital information, how to analyze data, and cybersecurity concepts. Students will also learn to program in the Python programming language. Through coding they will learn the basics of variables, conditionals, functions, lists, loops, algorithms, parameters, return functions and libraries. Students will also prepare for the College Board APCS Principles exam which consists of a coding Create Task submission along with a multiple-choice exam.

Academic Suitability:

It is suggested that students take Introduction to Digital Technology prior to taking APCS Principles. Students will learn about general computer science topics as well as learn to code in the Python programming language. This is a fun but rigorous course. During the course all students will prepare for the APCS Principles exam and will complete the Create Performance Task for this exam. After taking APCS Principles, students will be prepared to take the APCS A (Java programming) course

Out of Class Commitment:

Students should expect to spend 5-8 hours per week outside of class working on their AP Computer Science Principles coursework.

Summer Suggested Preparation:

Go to <https://codehs.com/go/080D2> and use the course code (080D2) to join this online workbook. Complete the Introduction to Programming Unit over summer.

School Issued Text Name:

There is not a school issued textbook for APCS Principles. This course uses online lessons and an interactive workbook to prepare students for the AP Exam.

Additional Resources:

- [APCS Principles Course Overview](#)
- *Barron's AP Computer Science Principles 2nd Edition (2021)*