

## AP Computer Science A Syllabus

### RCAS Policies/Procedures

Students will be required to follow all RCAS policies and procedures. To view the RCAS High School Student Handbook, click [handbook](#).

### Course Description

AP Computer Science A introduces students to computer science through programming. Fundamental topics in this course include the design of solutions to problems, the use of data structures to organize large sets of data, the development and implementation of algorithms to process data and discover new information, the analysis of potential solutions, and the ethical and social implications of computing systems. The course emphasizes object-oriented programming and design using the Java programming language.

### Grading

The course consists of video lectures, daily programming exercises, longer coding assignments, regular quizzes, projects, and exams.

Course grade will be based on the following components:

- Practice Activities (10%)
- Assignments and Quizzes (30%)
- Tests (60%)

### Textbook

Online text: AP Computer Science A by Project STEM.

Textbook: David J Eck's "Introduction to Programming Using Java." (2013).

### Reading

N/A

### Optional Reading

N/A

### Instructional Resources

- AP Classroom (College Board)
- ProjectStem Canvas

### Essential Questions

- College Board has produced an extensive 'Course and Exam Description' pdf document with all of the essential questions (referred to in the text as **Big Ideas**). The document is available here: <https://apcentral.collegeboard.org/media/pdf/ap-computer-science-a-course-and-exam-description.pdf>
- If this link is no longer valid, the Course and Exam Description document is easily found by using a search engine with the query: 'AP Computer Science A Course and Exam Description'

## Essential Learning Intentions

- College Board has produced an extensive 'Course and Exam Description' pdf document with all of the learning intentions (referred to in the text as **Learning Objectives**). The document is available here: <https://apcentral.collegeboard.org/media/pdf/ap-computer-science-a-course-and-exam-description.pdf>
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