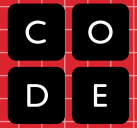# Code.org CS Principles Curriculum Project

The Advanced Placement Computer Science Principles (CSP) course stands to change the way American high schools teach and promote computer science, vastly increasing access to a world of educational and career opportunities not previously available to the majority of secondary education students. The College Board, with the input of the computer science community, has created a comprehensive course framework of learning objectives as well as sample teaching guides, leaving curriculum implementation in classrooms to teachers and school districts. Creating an actual course from a framework of concepts is no small undertaking, and to date no actual high school curriculum, including a sequence of topics, lessons, and assessments that satisfies the CSP framework, has been developed. In order to scale CS Principles throughout the country and support educators in teaching the new course, Code.org will be creating a customizable, blended-learning curriculum for implementing an AP CS Principles course at the high school level.

Code.org's goal is to build a CSP curriculum targeted specifically toward the needs of high school students and teachers that will allow for dramatic scale across the country. The curriculum will use a pedagogical approach to computer science that engages all students, while maintaining college-level rigor. Such a curriculum package for high school teachers will also aid teachers and administrators advocating for the inclusion of the course in their schools. In conjunction with the curriculum project, Code.org is designing and providing comprehensive professional development opportunities for both experienced teachers and those who are new to teaching computer science.

The writing team has the following goals in creating this curriculum:

- Create a full-year, "head-to-tail," rigorous high school curriculum with detailed lesson plans, activities, projects, and assessments aligned to the CSP Framework.

- Develop online, instructional videos featuring experts and role models that may be used as a component of a blended-learning model.

- Create curricular materials grounded in equitable teaching practices and inquiry-based instructional strategies that will engage all students in constructing their own understanding of computer science concepts.

- Make the curriculum a flexible starting point for experienced teachers, but also a practical daily guide for inexperienced, or new-to-CS teachers.

- Follow the development of the new types of assessments being designed by the College Board for CSP to ensure that students' experiences and work in the course prepare them for both the end-of-course exam and portfolio-based performance assessments.

- Make the curriculum available to the CS education community in online and print formats.

A personal note from the team:

We are a curriculum writing team comprised of high school CS educators who have taught introductory through advanced computer science courses in a variety of settings with diverse student populations. As a group we passionately believe that all students should have access to comprehensive, rigorous computing education. We plan to engage the computer science teaching community along the way to ensure that we create the tools and materials that our community truly needs. We hope to serve you well and invite your thoughts and feedback. Contact us at curriculum@code.org

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