

Who Should take AP[®] Computer Science?

- Juniors or seniors that enjoy problem solving or Math.
- Students who enjoyed Programming I (VB) or Principles of Computer Science.
- Critical thinkers and hard workers!
- Students who want an extra year of Math without taking a higher level Math course.
- Students who aren't afraid to try and fail, and then try again!



Steve Jobs

"I think everybody in this country should learn how to program a computer because it teaches you how to think."

HOW TO SUCCEED IN AP[®] COMPUTER SCIENCE :

- Read class material
- Work through assigned labs and problems as assigned
- Think critically and logically
- Don't be afraid to try!
- Be persistent in attempting projects, don't give up!



Bill Gates

"Learning to write programs stretches your mind, and helps you think better, creates a way of thinking about things that I think is helpful in all domains."



President Bill Clinton

"Every single year in America there is a standing demand for 120,000 people who are training in computer science."



Todd Young U.S. Congressman, Indiana

"A background in computer science provides a strong foundation for nearly any career path in any industry in the 21st century economy."

PIKE HIGH SCHOOL

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PIKE HIGH SCHOOL



AP[®] Computer Science

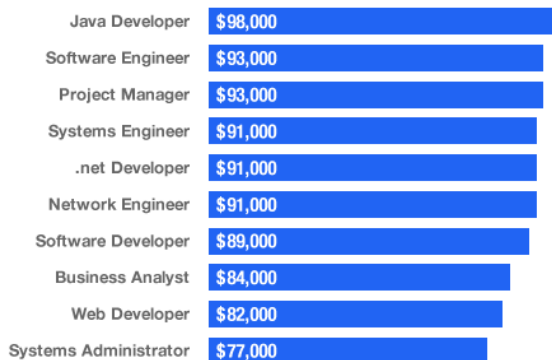
Chad Bobb
Teacher

Phone: 317-387-4248

Why take AP[®] Computer Science?

Taking AP[®] Computer Science in high school allows for more instruction and class time as well as more attention from the instructor. Computer science develops students' computational and critical thinking skills and shows them how to create, not simply use, new technologies. This fundamental knowledge is needed to prepare students for the 21st century, regardless of their ultimate field of study or occupation. In the 21st century, information technology is permeating many aspects of daily life and big data, software, and the Internet are being integrated into businesses and products throughout society. The knowledge and skills learned from studying computer science prepare students for careers in a variety of sectors.

Average salaries for the most popular computer science job titles



*in USD as of Oct 9, 2012

COURSE OBJECTIVES:

- design and implement computer-based solutions to problems in a variety of application areas.
- use and implement well-known algorithms and data structures.
- develop and select appropriate algorithms and data structures to solve problems.
- code fluently in an object-oriented paradigm using the programming language Java.
- read and understand a large program consisting of several classes and interacting objects.



will.i.am

Musician/The Black Eyed Peas and Entrepreneur

"Here we are, 2013, we ALL depend on technology to communicate, to bank, and none of us know how to read and write code. It's important for these kids, right now, starting at 8 years old, to read and write code."

COURSE TOPICS:

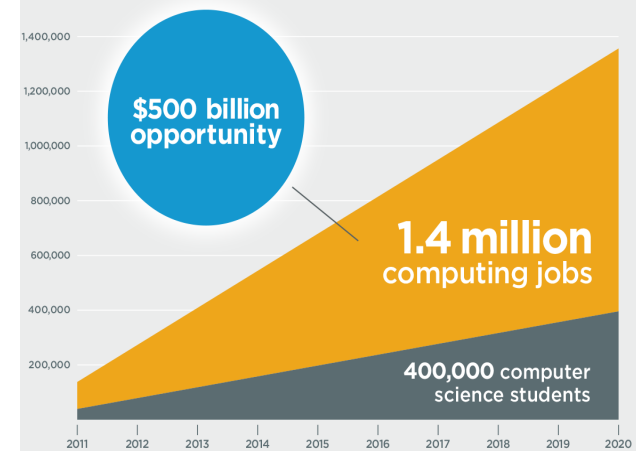
Material Covered—Semester I

- Introduction to Java and Computing
- Fundamental Data Types
- Classes, Objects, and Applets
- Decisions and Control Flow
- Boolean Expressions and Iterations
- Methods and Parameters

Material Covered—Semester 2

- Arrays and Array Lists
- More Methods and Recursion
- Debugging
- Inheritance and Polymorphism
- Interfaces and Event Handling
- Sorting and Searching
- AP[®] Exam Review

1,000,000 more jobs than students by 2020



COURSE GRADES:

I strive to create a fun, exciting, and comfortable learning environment for everyone that is willing to learn. I aim to motivate students to learn something new each day and become a life long learner. I will use daily exercise with hands-on activities, worksheets, and other such assignments. I encourage every student to take risks while programming and to go above and beyond on each assignment.

Grades are based on the Pike Grading Scale. The class grade consists of approximately 35% labs, 25% worksheets and vocabulary, and 35% tests and quizzes.