

Qualifications

- ◆ A high “B” in Algebra II or above
- ◆ Suggested to take APCS-Principles before this course
- ◆ A keen interest in all things computer related
- ◆ Good reading skills
- ◆ Good problem solving skills
- ◆ Enjoys logic and puzzle games
- ◆ Is able to use technology to solve problems
- ◆ Enjoys solving applied real-world problems
- ◆ Is driven to spend the extra time required to find the best solution to a problem

“I like to build things... and,
I just wanted to see if I could do it!”
Mark Zuckerberg

“If there’s a better solution... find it!”
Thomas Edison

This is the last
and
MOST RIGOROUS
Computer Science course
offered at
Roswell High School
in the
Programming Pathway



ROSWELL HIGH SCHOOL

11595 King Road
Roswell, Georgia 30075
Telephone: 470-254-4500

www.MrLeeComputing.org

<https://apstudent.collegeboard.org>

ROSWELL HIGH SCHOOL

AP COMPUTER SCIENCE-A

PROGRAMMING WITH JAVA



Teacher: Mr. Kenneth Lee

AP COMPUTER SCIENCE A FAQs

What is AP Computer Science A?

AP Computer Science is a college level introductory course in programming. You'll learn Object Oriented Programming Principles using the Java Programming Language. Because it's an AP course, you can earn college credit with a 3 or higher on the AP Exam.

Why Should I Take It?

Computers are used throughout society and in every niche of business. If you like computers and like to be intellectually challenged, computer science may be a very fulfilling path for you both in college and beyond. Even if you aren't considering a career in computing, a Computer Science class can help! Any math, science, or engineering field will require an advanced knowledge of computers.

Who Uses Computer Science and Programming?

All business is touched by computing. Whether you work in the private, public, or non-profit sector, you will be exposed to or require some knowledge of computing. Programming however, goes much deeper than simply using computers. A deeper understanding is of particular benefit to any of the Information Technology Fields. But remember, even small business owners need to be savvy about computing to succeed!

How Hard Is AP Computer Science?

It's a college course, so the expectations are high. You'll be expected to be programming every day, and not just in the classroom. There is reading and writing involved. But more importantly, you will need to dedicate yourself to spending the time necessary to gain a command of the concepts. In fact, if you think that programming is simply another outlet to "play games" on the computer, you may be disappointed. Programming is a challenge. It takes a particularly determined mind to struggle with the concepts until "it clicks" for you!

Could I Take Computer Science In College?

Yes, and you probably will. Intro Programming is required for many math and science majors, and certainly recommended for others. Obviously, if you are headed to a technical school, a programming class now would give you an advantage in your first year of study.

Then Why Should I Take It In High School?

There are several advantages. Here it's a full year course so you'll have more opportunities to ask questions and really understand the concepts than at college where the class meets only a few times per week for one semester. You will enter college ready to apply your skills in your first semester courses. Many students choose to take intro programming again in college and find that they have a huge advantage over their classmates who have not had prior introduction to the concepts.

What the Course Covers...

- ◆ **Computer Ethics**
- ◆ **History of Computing**
- ◆ **Colleges and Careers**
- ◆ **Computer Systems Intro**
- ◆ **Intro to Algorithms**
- ◆ **Objects and Primitive Data**
- ◆ **Program Statements**
- ◆ **Writing Classes**
- ◆ **Arrays and ArrayLists**
- ◆ **Searching and Sorting**
- ◆ **Inheritance/Polymorphism**
- ◆ **Recursion**
- ◆ **Enhancing Classes**
- ◆ **AP Suggested Labs**
- ◆ **AP Test Preparation**

NOTE :

This course now qualifies as a High School Science or Math Credit!