

AP Computer Science A

Ms. Rehwinkel

Room A234

Email: crehwinkel@frhsd.com

Welcome! Writing computer programs will teach you how to approach problems methodically. You will learn to break down complex issues into smaller, more manageable parts and devise logical solutions. These problem-solving skills are valuable in many aspects of life and across various disciplines. In this course you will learn the basics of programming in the Java language, write lots of programs and find a LOT of bugs!

Coding skills are in high demand across a wide range of careers, not just in technology and computer science. From marketing and finance to healthcare and art, many fields benefit from employees who can understand and leverage technology. Even a basic knowledge of coding can set students apart in the job market.

This is a college level Computer Science course, and **to do well you should expect to put time into studying and doing homework regularly**. It is strongly recommended that you use a computer at home or school outside of class time to write code and practice.

Classroom Procedures

Bring a notebook and something to write with to class every day. **DO NOT** have your phone out on the desk or in your lap. **All phones should be put away in your bag and not taken out during class.**

Any work missed due to absences is your responsibility to make up. *****Check Google Classroom for classroom notes and missed work whenever you are absent. *****

Grading The categories that make up your grade are:

75% - Major - Tests/Quizzes/Major Programs

25% - Minor – Projects/Classwork/MiniQuizzes/Smaller Programs/Homework

Extra Help – Before school starting at 7:45 am in A234.

Tips on Learning How to Program

1. What may be clear and plain as day for you, may be confusing to someone else. Be patient. Help your fellow classmates. You'll learn a lot more that way too.
2. The purpose of assignments is to help you to understand the material. **Spend some time thinking and tinkering.**
3. Experiment!. If you are wondering whether or not something works, just try it! Worst case scenario, your program crashes or doesn't run at all. **You will learn by making mistakes.**
4. **Do not copy other student's programs.** If you do, you will miss out on learning and understanding crucial skills that you need.
5. The program you write will do **exactly** what you tell it to do. (this may be different than what you want it to do!)
6. **Practice programming nearly every day.**
7. **Ask questions. Expect to run into problems. Things don't usually work the first time.**

Website that will be used in class:

We will use the following websites for practice and learning.

Practice Problems

Practice – It	https://practiceit.cs.washington.edu/
codingBat	http://codingbat.com/java
codestepbystep	http://www.codestepbystep.com

Tutorials with Questions/Problems

Ebook (CS Awesome):

<https://runestone.academy/runestone/books/published/csawesome/index.html>

codeHS: <https://codehs.com>