

# Advanced Programming Projects

Teacher info:

Mr. Mike Efram

Room: 49 (class) / 51 (lab)

e-mail: [mikee101@yahoo.com](mailto:mikee101@yahoo.com), [mefram@husd.com](mailto:mefram@husd.com)

Web page: [www.mrefram.com](http://www.mrefram.com)

## 1. Course Description

Welcome to Advanced Programming Projects. I hope this class will be interesting and enjoyable, as I will do my best to make it so. In this course, we will start by creating several games using the graphics capabilities of Java, double-buffering, threads, and multithreading, topics that are important in computer science but not taught in AP Computer Science. After the game units, we will start exploring the development of mobile apps using the Android platform. We will use the professional tool Android Studio and Java. Finally, towards the end of the year, we will explore other data structures “beyond the array” that are used in Computer Science applications.

This class will be project based with lots of lab time to work on your programs.

## 2. Our Textbooks

We will be using many resources in this course. As the field of Computer Science continues to change at a rapid pace, it is not realistic for the school district to purchase textbooks. There will always be the books that we used in AP Computer Science in the lab but we will be using many online resources, especially once we start developing for the Android operating system.

## 3. Optional Software for your home computer:

You will not be expected to do any programming **on a computer** at home (I cannot expect that every student has a computer at home). If you are interested though, you can install the software to compile and run your programs.

We will begin the year using your old familiar JCreator and then transition to using Android Studio late in the first semester. Android Studio will be used to develop your Java-based Android Apps.

## 4. Tardy Policy

Schoolwide tardy policy.

## 5. Grading Policy

1) 100% - Projects

---

Grading scale	92 - 100	A	77 - 80	C+
	90 - 92	A-	70 - 77	C
	88 - 90	B+	67 - 70	C-
	82 - 88	B	60 - 67	D
	80 - 82	B-	<60	F

## 6. Required Materials:

- Notebook
- USB Flash Drive (provided for those who do not have one)