

# AP Computer Science A

## Summer Prep

Hello and welcome to AP CS A course here at West Seattle HS. This class is the equivalent of the University of Washington Computer Science initial CSE 142 course for CS majors. In fact, you can get a UW transcript and credit for this course. Give some thought to whether you want to get that transcript over the summer. You have until October to make up your mind.

**The assignment for the summer is to find and read an interesting article on the impact of Computer Science technology on our lives. Things to look for are an impact on the labor market (positive and negative), an impact on our privacy and security, an impact on how we live our lives, etc. We will discuss your articles when school starts in the fall.**

There is no programming background required for the class. However, this is an AP class which means that we will be covering a lot of material quickly. Here are some options to get a head start.

[Lightbot](http://lightbot.com/hocflash.html) (<http://lightbot.com/hocflash.html>) – This is a fun set of exercises that are not language specific but which exercise thinking programmatically and introduce how to use functions and iteration (looping) to simplify programs. I enjoyed doing these just for the fun of it.

[Installing Java](http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html): You can install the latest Java development kit (JDK) (<http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>.)

[JGrasp Tutorials](http://www.jgrasp.org/) (<http://www.jgrasp.org/>) –jGrasp is the environment that we will be using to build and debug our programs. On their site, there are a series of tutorials on the lower left of the page that point to incremental tutorials on how to install and use JGrasp. Don't go past 'Getting Started' (2.0) and stop when you get to Projects. That will be plenty to get you through most of the course and there are several things in jGrasp that we will not use in the course.

[Java Tutorial Videos](https://www.thenewboston.com/videos.php?cat=31) (<https://www.thenewboston.com/videos.php?cat=31>) – The programming language that we will be using is Java. The videos at this site take you through a step by step introduction to the language if you would like to get a taste of it. Part of programming is learning the Integrated Development Environment (IDE) that you use to write, compile, and test your programs. Unfortunately, these videos use the Eclipse IDE and we will be using JGrasp in the class. If you want to, you can go ahead and use Eclipse and switch over to JGrasp in the fall. JGrasp is simpler so it should be an easy move. Alternatively, you could go through the jGrasp 'Getting Started' tutorial below and then selectively view the videos for the Java specific content.

[Coding.bat](http://codingbat.com/java) (<http://codingbat.com/java>) and [PracticeIt](http://practiceit.cs.washington.edu/index.jsp) (<http://practiceit.cs.washington.edu/index.jsp>) – These are a couple of fun sites if you already know some Java but want to brush up. Neither of these sites requires that you install an IDE. They give you a programming problem and some space to enter a write a solution. They then test your solution and let you know if it works correctly. You can also see their solution. We will be using PracticeIt in class so when you create an account, enter your school as 'West Seattle High School' to get credit for any work you do.

If you get stuck with any of this, please send me an email at [rcmiller@seattleschools.org](mailto:rcmiller@seattleschools.org) anytime. I will be away in July and early August but outside of those periods, I will get back to you as quickly as I can.

I'm looking forward to an exciting class next year. Have a great summer.

Mr. Colin Miller