**Computer Science II Honors/Advanced Placement**

**Syllabus**

**Teacher: Vicki Coffman**

**Room: K103**

**Conference: 8:25 – 9:15 AM**

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**Purpose of Course:**

This course will focus on programming methodology, algorithms, and data structures. It requires strong

problem-solving skills and independent study. The course generally provides an avenue for advanced

placement in one semester of college Computer Science. Students may enter the course directly or take Computer Science I preAP as preparation. Students entering the course directly should be prepared for a fast pace.

**Summary of Course Content:**

The course will use text, sample programs, hands-on exercises, lecture, and discussion to cover Java

syntax, variables and constants, data types, program input/output, methods, parameters, classes, control

structures, Boolean logic, program design, data structures, object oriented programming, algorithms,

recursion, and overloaded methods. One or more large-scale projects also will be included.

**Textbooks:**

The primary texts are Leon Schram’s *Exposure Java* and Stacey Armstrong’s *A+ Computer Science.* The texts are available on Schoology. Each student should copy the materials to a cloud or USB drive. The Barron’s AP book and/or 5 Steps to a 5 will also be used. It is recommended that students buy a copy (they are not expensive): <https://www.amazon.com/Barrons-AP-Computer-Science-7th/dp/1438005946>, <https://www.amazon.com/Steps-AP-Computer-Science-2019/dp/1260122646> . Various hard-copy textbooks are available for checkout if desired, on a first-come, first-served basis. Other materials or links may be posted on the class website: <http://www.fortbendisd.com/Page/6080>.

**Grading:**

There will be at least three major grades per nine weeks, consisting of chapter (written) tests and lab

(programming) tests. There will be at least nine daily grades per nine weeks, consisting of chapter quizzes and lab quizzes. **Tests on which the grade is less than 75 may be retaken for a maximum grade of 75. Students must attend at least one tutorial before retesting. Tutorial and retest must be done within a reasonable period of time – ask me for the deadline at the time you get your test grade.**

**Tutorials:**

Tutorials and additional computer lab time are available 2:45PM-3:10PM daily, and 11:35AM-11:55AM daily except Tuesdays, with rare exceptions, which will be announced as far in advance as possible. Morning tutorials are available by appointment.

**Materials Needed:**

Notebook, pencil or pen, cloud or USB drive for class materials and projects.

It is highly recommended that students install the Java SDK and a Java IDE such as DrJava, JGrasp, Eclipse, NetBeans, etc., on their home computers. These products are free, and can be downloaded from the web:

<https://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>

<http://www.jgrasp.org/>