AP Computer Science AB Syllabus, 2008-2009

with Mr. Wulsin

Overview

Welcome to AP Comp Sci! In this class, we will cover all of the material required for the AP AB Computer Science exam on May 5th, 2009. You will learn both basic and advanced programming cocepts used across many different programming languages. We will spend most of our time on the Java language. We will spend only about a quarter of our classtime in lecture, and during the rest of the class time, you will work on your programming assignments. You will probably also have to work on these assignments at home.

Text

Java Methods A & AB: Object Oriented Programming and Data Structures by Maria Litvin & Gary Litvin

Grading & Expectations

Your quarter grade will be broken down into the following categories and weights:

 $\begin{array}{ll} {\rm Assignments} & 60\% \\ {\rm Tests \ \& \ Quizzes} & 30\% \\ {\rm Classwork} & 10\% \\ \end{array}$

You will submit all assignments electronically. All programming assignments will be graded on both correctness_efficiency and design_style. You must submit written answers in a text file(.txt, no Word files). All submitted files must have the prefix **Assignment-X.Y-LastName.zip**, where **X.Y** is the assignment number and **LastName** is—obviously—your last name. So, for the first assignment, I would submit **Assignment-1.1-Wulsin.zip**. All assignments are due by 8am on the morning they are due. You will have a dedicated folder on your M:_ drive for the class. In this folder you will create your projects for every assignment using the Eclipse IDE and store them in subfolders for each programming assignment.

Syllabus Overview

General Topics	Rotation
Intro to Computing	Summer
Programming Fundamentals	1-2
Control Structures, Arrays, Classes Intro	3-4
Class Hierarchy & Interfaces, Strings, ArrayLists	5-6
Sorting & Searching, Big-Oh Notation, GridWorld Parts I-III	7-8
Linked Lists, Stacks, Queues, & Iterators	9-10
Trees, Recursion, & Heaps	11-12
Sets, Maps, & Hash Tables	13-15
GridWorld Parts IV-V & AP Review	15-17