Pre-AP® Computer Science (Pre-APCS)

James Madison High School - Career & Technical Education
Course Syllabus and Guidelines- 2016-2017

Teacher: Michael S. Soto
Location: Room H2002
Planning Period: 2nd Period (9:42 AM—10:35 AM)
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I.   Class Overview

Recommended Prerequisite: Algebra I.
This course is recommended for students in Grades 9-12.
> The necessary prerequisites for entering the AP Computer Science A course include knowledge of basic algebra and experience in problem solving. A student in the AP Computer Science A course should be comfortable with functions and the concepts found in the uses of functional notation, such as `f(x) = x + 2` and `f(x) = g(h(x))`. A computer science course builds upon a foundation of mathematical reasoning that should be acquired before attempting such a course.

II.   Textbooks and Materials

Texts: Lewis, J., Loftus, W., Cocking, C. *Java™ Software Solutions for AP Computer Science* 3rd Ed. Boston, MA: Pearson Ed. Inc.: 2011.
> Cook, Charles E**.** Blue Pelican Java. Version 3.0.5K. Refugio, TX: Charles E. Cook: 2010.
> Schram, Leon. *Exposure Java 2011*. Royse City, TX: Leon Schram, 2011.
> **http://www.schram.org**

A pen drive or portable storage device, minimum of (1GB), will be required for saving projects, and a Spiral or Composition notebook dedicated to the course is required, as well.

III. Course Description

> This course is an introduction to computer science using Java to solve problems and create programs. By the end of the year students will have written many programs implementing algorithm development, data types, variables, object oriented programming techniques, decision making, iteration, arrays, and 2D arrays. Software design concepts and group learning similar to real word situations will be experienced.

IV.   Software

> We will use Snap!, Jeroo, DrJava, JCreator and Java JDK class – all are free and available for download and home use.

V.   Scope and Sequence

Class notes and lectures will follow the Fundamentals of Java AP Computer Science Essentials 4th Edition textbook. Students were not checked out a book for this class.   Powerpoints over each chapter will be posted online. We will work on programming assignments, lab quizzes and enrichment assignments during class time.

- Background Of Programming, Edit, Compile And Run Programs
- Syntax, Errors And Debugging
- Introduction To Control Statements
- Introduction To Defining Classes

- Control Statements Continued
- 1D Arrays, 2D Arrays, ArrayList
- Refining Classes
- GUI

VI.   Attendance and Course Evaluation

Grades will be based on attendance, participation, and successful completion of various assignments, and projects throughout this course. Quizzes and tests will be given periodically to check your knowledge and multimedia skills.

Attendance Policy

An unexcused absence is an absence from school that the parents/guardians are aware of, but was not approved by school administration as an excused absence. Make-up work for unexcused absences will be penalized equal to late work. A 20percent deduction from the total grade earned will be taken on make-up work for unexcused absences.

Grading

Grading Guidelines	
Daily Assignments	25%
Quizzes/Tests/Projects	50%
Final Exam	25%
Total	100%

Grading Scale	
A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	<60%

Programming projects will be graded on a varying scale based on difficulty from 50pt versions up to 110 pt versions. A 0 will be given for failure to turn in a programming project.

Late Work

A. Late work is defined as any assignment that is not submitted on the due date and class period with the exception of make-up work for absences or approved school activities.

B. A 20% deduction from the total grade earned will be taken for late assignments.

C. Late assignments will be accepted until the material has been assessed summatively or within a three week grading period.

D. Extenuating circumstances may occur that prevent the completion and turning in of assignments on the due date. It is the parent/guardian and/or student's responsibility to inform the teacher and/or an appropriate administrator of any such circumstances so that an exception to the rule may or may not be granted. The teacher and/or appropriate administrator shall have the authority to render a final decision on the granting of any exceptions.

James Madison High School
Career & Technical Education Department

Receipt of Pre-AP® Computer Science (Pre-APCS) Syllabus

I have read the Pre-AP® Computer Science (Pre-APCS) Syllabus and understand the expectations and mature behavior that are expected for students who take the course.

Student Name: _____

Student Signature: _____

Parent's Name: _____

Parent's Name: _____

Parent Signature: _____   Date: _____

Home Phone Number: _____

Mom's Cell Phone No.: _____

Dad's Cell Phone No.: _____

E-mail Address: _____

Home Address: _____

Zip Code: _____