



## Course Overview

This course is designed for students who are serious about programming. JAVA requires a good mathematical background and strong problem solving skills. The course is designed to prepare a student for the Advanced Placement® Computer Science exam, level A. Topics include: simple, user defined and structured data types, algorithm development, decisions and loops, arrays, recursion, searches and sorts, data abstraction, and classes. The curriculum we use in this class is approved by the College Board as an authorized AP Computer Science course.

## Course Objectives

At the end of the course students will be able to:

- *Understand object-oriented programming and top-down design*
- *Understand and use conditionals and loops*
- *Understand and use strings and arrays*
- *Understand and use classes*
- *Understand and use methods and recursion*
- *Analyze, design, code and test software*
- *Be prepared to take the AP Computer Science test*

## Textbook

This course will reference a free, online textbook.  
**Eck, David J.** "Introduction to Programming Using Java." Hobart and Williams Smith Colleges, 17 May 2013. Web. 09 July 2013.

### Other Recommended Resources:

**Deitel.** "Java How to Program", Tenth Edition. Prentice Hall, 2015

Mr. Lew's APCS Homework and videos online at:  
[http://www.thecubscientist.com/APCS/indexAPCS\\_HW.html](http://www.thecubscientist.com/APCS/indexAPCS_HW.html)

## Make-up Requirements

Students who find it necessary to be absent are expected to make-up their missed assignments within **2 weeks** of the students return. Work can **ONLY** be made up if the absence is **EXCUSED**.

## Participation

As with any career, your employer will have expectations for your performance. The following personal management skills will help you in this class and in the real world working environment.

1. **Self Management** – I come to class prepared and on time, follow directions the first time they are given, use appropriate language, and check for the work I've missed.
2. **Persistence** – I am on task, proof-read my work, have a positive mindset, and use my resources (textbook, websites, help folder, posters, & classmates).
3. **Contribution** – I participate in this class, respect my classmates and teacher, and help other classmates learn.

## Grade Scale

This is an approximate breakdown of how grades will be calculated.

Daily Activities .....	10%
Assignments and Quizzes .....	30%
Exams.....	60%

## Contact Information

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