

# **Course Syllabus**

Course: Computer Programming Teacher: Mr. Matt Gottsacker Length/Credits: Semester / 0.5 credit Email: gottsacker@muhs.edu

### **Course Description**

This is an introductory programming class, and you should expect that it will be both fun and challenging. We will use the Java programming language. For educational and development uses, Java is available free for Windows, Linux, and Mac OS X operating systems. Java is the language used in AP Computer Science, and many of the concepts presented are an excellent preparation for AP Computer Science. In fact, this class uses the same textbook as the AP CS course. If you are interested in taking the AP CS course next year, please let me know.

### **Course Objectives**

- Knowledge and understanding of the Java programming language
- Ability to write Java programs that compile and execute properly
- Knowledge and understanding of fundamental programming concepts, including primitive data types, variables, constants, assignments, expressions, operators, selection statements, mathematical functions, characters, strings, loops, and methods
- Ability to apply fundamental programming concepts to solve interdisciplinary problems

### Required Text(s)

Liang, Y. Daniel. Introduction to Java Programming: AP Edition. Pearson. (Physical OR digital allowed).

# **Required Materials**

- Computer with JDK and Geany installed
- Pencil(s) and eraser
- Folder or storage device for handouts, worksheets, and returned quizzes and tests

# **Suggested Materials**

- Notebook for taking notes / designing programs
- TI-83/84 calculator or better for checking calculations

#### **Course Outline**

- Introduction to Java
- Elementary Programming
- Selections

 Mathematical Functions, Characters, and Strings Methods

Loops

### **Assessment and Grading Methods**

Your grade is determined by three factors:

- 50% Programming Exercises
- 30% Quizzes
- 20% Semester Project

Your letter grade is determined based on the scale in the MUHS Student Handbook:

A+	98-100
A	93-97
A-	90-92
B+	87-89
В	83-86
B-	80-82
C+	77-79
С	73-76
C-	70-72
D+	67-69
D	63-66
D-	60-62
F	Below 60

#### Homework

Students will receive an assignment sheet for each chapter of the course with several programming exercises. Due dates for each of the exercises will be posted on the course website. Unless otherwise indicated, all exercises should be completed independently. Some group work will be assigned.

All assignments are to be completed by 11:59 PM on their designated due date. Late work is subject to a 10% deduction for every day late.

# Extra Help

If you are having trouble, please see me as soon as you can. You can work with me before or after school, or during school if we have compatible schedules. I will be prefecting in the following locations and periods Monday-Friday:

- 1: 2<sup>nd</sup> Floor Atrium
- 3: 3<sup>rd</sup> Floor Atrium
- 5: B&G
- 6: B&G / Cannon Commons

Feel free to find me and meet with me during those periods.

I have 7<sup>th</sup> period free everyday except Wednesday. I am willing to meet during my lunch, which is 4<sup>th</sup> period. If you want to set up a meeting during one of those periods or outside of regular school hours, send me an email.

# **Classroom Expectations**

- Students are seated and ready to begin at the bell.
- Computers are at a 45-degree angle during non-interactive class lectures.
- Computers are to be used primarily for computer science work. If the assigned work is completed, computers may be used for other other academic work.
- A student using a computer for non-academic work will receive a JUG.

- If a student misses class, he is responsible for the material covered and the homework assigned on the day he returns to school, unless he contacts me for an extension.
- Students bring required materials everyday.
- A score of zero will be assigned to any work involved in any form of cheating.
- All provisions of the MUHS Student Handbook apply to this course.

### **Cheating Guidelines for Computer Programming and AP Computer Science**

The following are expressly forbidden:

- Obtaining solutions to programming assignments by performing searches on the Internet, including but not limited to StackOverflow.com
- Sending one's code to another student, for any reason
- Collaborating with other students on individual programming projects (yielding code that is substantially similar or identical)
- Any other activity deemed to be academically dishonest by the teacher in consultation with the administration.