



## Computer Science Department AP Computer Science A – Fundamentals of Java

Instructor: Mrs. Brunner  
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**Description:** This course is a college-level course designed for hard working computer science students. Students will use the programming language Java as the tool for solving problems using a scientific problem-solving method. Topics will include: control structures, arrays, matrices, object-oriented programming and templated classes. This course prepares students for the AP Computer Science A exam and includes an in-depth analysis of the GridWorld Case Study prepared by the College Board.

**Texts:** Java Software Solutions: by John Lewis, William Loftus, Cara Cocking  
2<sup>nd</sup> Edition  
ISBN: 0132222515

### **Materials:**

- Flash drive – provided by student to save class files and must be dedicated to the class and remain in the classroom
- GridWorld Case Study materials – provided by the instructor

**\*\*\*The student must utilize the same flash drive everyday for class, and this flash drive must be brought to class everyday.**

**Software:** The software used for this course is Eclipse IDE for Java Developers. This software is available to download for free at <http://www.eclipse.org>.

**Grading Policy:** All tests, projects, and classroom assignments are scored based on level of difficulty using a numerical point system. All possible points are totaled and each student's percent of total points determines their course grade.

**Assignments:** Students are to turn in all assignments on the appointed due date. Assignments not turned in on the appointed due date are considered missing assignments. Students may turn in missing assignments within one week of the due date. Assignments turned in after the allotted week will not be accepted. If a student is absent from class, the student will receive the same number of days as the absence in order to make up the assignment.

### **Attendance:**

Because of the nature of the instruction and the need for repetitive practice, absence from class will place the student at a great disadvantage. Skills and techniques will only be demonstrated **once**. Please make every effort to attend all classes. Do not ask to be excused from class during instruction if your exercises and projects are not complete.

### **Computer Lab Procedures:**

1. Students must arrive to the computer lab on time, obtain their materials (folder/lab book) and begin their lab work as expeditiously as possible.
2. Students are NOT permitted to handle another student's data files or flash drive at any time.
3. Unauthorized copying of software is prohibited.
4. Software installations and/or downloads are prohibited.
5. No food or drink is permitted in the computer lab.
6. Do not access games/internet during scheduled computer lab time. This will result in a demerit for the first offense and a detention on subsequent offenses.
7. Students who do not respect property in the computer lab will be subject to immediate detention.

### **Expectations:**

1. Students are to print their lab work as they complete each assignment; as files can be lost.
2. Students must not wait until the last hour of the last day to finish and turn in their lab work. Computers are unpredictable and students MUST afford themselves enough time for unforeseen eventualities.
3. If the due date is approaching and a student feels he/she is behind, computers are available (the 2 labs/LMC) during lunch periods and after school.
4. If there are unique circumstances (ex., lengthy illness, injury, etc.) you may request permission to complete an assignment.

**Academic Dishonesty** – Cheating, fabrication, plagiarism and allowing another to benefit from your work are all forms of academic dishonesty. Copying a file and modifying it is dishonest. Lending another student your file or flash drive is dishonest. All forms of dishonesty will result in a zero (0) on the exercise, project or test and a referral to the administration for discipline under the Code of Conduct.

***Your integrity is at stake. Make the right choice, every time!***

**Teacher Availability:** I am available in the Computer Science Lab from 2:35 to 3:00 PM daily. Please feel free to drop in during these times. However, if you wish for a private conference, please contact me via e-mail at [brunnera@archbishopspalding.org](mailto:brunnera@archbishopspalding.org).