Dr. Zachi Baharav

Room 213

zbaharav@kehillah.org

Open Blocks: 4,5,6,7

Course description
Welcome to AP Computer Science. I am looking forward to an exciting year as we continue the journey moving from the basics of programming into the realm of object oriented paradigm and computer science related algorithms. This will allow us to solve interesting practical problems, as well as improve our problem solving skills.
To this aim, we will pay special attention to common methods and algorithms for solving problems. We will discuss how we identify what we know, what we want to know, looking at special cases, finding patterns, solving using known algorithms and methods, generalizing, verifying and reflecting. Special emphasize will be given to analyzing and improving a solution once one is found. This will improve the performance, robustness, and readability of our programs.

This is an AP course, and will require a significant amount of commitment and effort. Please be prepared!

Programming is not always easy, and can be frustrating at times. It is important that you will join with positive attitude and willing to learn! We are all a community of learners.

Availability and contacting me
I am open blocks 4,5,6 and 7, and plan to be during these times in room 213. I am usually available during these blocks for extra help, and would love to help individual or small groups. Feel free to drop-in. If you want to set a specific date/time to come and see me, email would work well.
Again, I am here to help.

Contacting me: Other than in person, the best way to reach me is through email: zbaharav@kehillah.org . I read emails daily on school-days, and will respond within 24-hours.

Textbook
"Big Java Late Objects", by Cay Horstmann. Wiley & Sons.
We will also purchase, around February, the AP preparation book. This is when the publishers include the latest version of the test.

What to bring to class each day
1. Computer (Laptop on which you have installed the IDE, and on which you can write the programs) ← You can either use your own, or let me know and we will arrange for one from the cart. BUT, you need to be consistent with your choice, and will need to have one in class!

2. <u>Writing instruments</u> of your preference (pencil, pen, colors) – The AP exam itself is done without computer, only paper and pencil. Moreover, we will also have activities in class that will require writing.
3. Text book – You will need it in some form. Electronic form is ok.

4. Enthusiasm and willingness to work and engage in class

<u>Detailed course description</u>
The material for the AP is well defined, and we will cover it by February.

The order of subjects will be close to the following: Fundamental data types; flow control; Strings; Methods; Arrays and Arrays Lists; Input/Output; Objects and classes; Inheritance and Interfaces; Recursion; Sorting and Searching; Basic data structures; Trees.

Depending on interest and time, we will cover graphics as well.

<u>Grading</u>

<u>Grade weighting</u>
Formal assessments (tests and quizzes) – 40%
Homework – 25%
Challenges – 20%
Timeliness – 10%
Class participation – 5%

<u>1. Homework</u>
We will usually have weekly homework assignments. This means that an assignment will be given once a week with a due date the following week. We will often start working on some of these during class, but it is expected you will need to continue your work on these at home.

<u>2. Class participation</u>
During class, I will often be asking students directly at certain points. You ALWAYS have the option of saying 'pass' and skip your turn, and it will not count against you in any way. However, be sure you are not always skipping your turn. Your answer is not evaluated for correctness, but rather for its intention and involved thought process.

<u>3. Quizzes</u>
Short quizzes (less than 15 minutes, one or two questions) will be given often, at the beginning of class. Usually there will NOT be advanced notice on quizzes. If you are late, you will not have an opportunity to make up the quiz, unless the tardy is excused.

<u>4. Tests</u>
Tests will be cumulative throughout the year. At least a week notice will be given, and appropriate accommodations made. I expect to have two during a semester.

<u>5. Challenges</u>
Challenges will be assigned throughout the year. Typically, these problems require more effort, are given more time, and you will be required to detail your thought process.

<u>Collaboration</u>

You are welcome (and are encouraged!) to collaborate on homework, challenges, and class assignments, unless specifically otherwise specified.
However, you are required to submit your own original work. In this regard, giving your work for someone else to copy is NOT ok. Describing and explaining your work to them is great and encouraged.

Using web resources
You are expected and encouraged to use the Web as a tool in your learning. There are many very good tutorials available, as well as Java documentation, and examples.
However, you need to clearly understand that COPYING an answer from the Web is plagiarism, and is not accepted. If in doubt, please come and see me first.

Class behavior guidelines
Students are expected to behave according to, and in a manner encouraging, our four commitments:
1. Everyone counts.
2. Everyone has equal access to great learning.
3. Every person's unique talents are valued equally.
4. We take responsibility for ourselves, our learning, and our community.

I expect us all to be courteous and respectful to fellow community members. Some specific items for my class:
1. Water drinking is okay, but please NO FOOD in the class (during class, or when you come on open-block times).
2. Taking pictures of class material is ok, but no other cell-phone usage please.
3. Working on computers and mobile devices when directed is ok, but please no un-related web-activity.
4. Raising your hand and asking to leave class is ok, but please don't leave without being dismissed.

Academic Integrity and Expectations
Academic integrity is essential to every academic institution. Students are expected to honor this value by acting honestly in every aspect of their academic lives. Violating academic integrity is contrary to Kehillah's core values and will be grounds for disciplinary action. Kehillah students are expected to perform and produce their own work. Substitution of another's work for one's own violates the school's expectation of academic integrity and impedes the intellectual growth of the student.
Academic Dishonesty Includes:
• Presenting as one's own an idea or statement taken in full or in part, or even paraphrased, from some other source – whether another person (such as a tutor or parent), a published work (including electronic and on-line publications), or another student's work.
• Using unauthorized notes or other aids in a test, or copying from or being influenced by another student's work (orally or visually) during a test, quiz, etc., or seeking unauthorized information about a test or quiz.
• Giving unauthorized aid to another student; allowing another student to copy or use one's test, paper, or homework; telling another student what was on a test that could be given to another student at a later time.

• Submitting papers or other work already produced for another course without the approval of both teachers.

• Obtaining help (from a parent, tutor, another teacher, or another student) on homework or take-home tests that exceeds the limits specified by the teacher assigning the work.

The Dean of Students will review the incident and determine the next steps which may include loss of credit for the assignment or test, an academic or disciplinary contract, suspension, and/or expulsion.

Timeliness Policy

    a. Assignments are given two separate grades: one on quality/content/ accuracy and the other on timeliness.

    b. Timeliness as a category is 10% of the final semester grade.

    c. Students have five school days past the agreed upon due date to turn in work. Past the five days, assignments are not accepted. At this point, the work receives a zero for both timeliness and content.

    d. If an assignment is submitted by the due date, it receives 100% for timeliness and a separate grade for content. If an assignment is turned in after the due date, but before the five school day window has closed, it receives 60% for timeliness, but may receive up to 100% for the content of the assignment.

    e. Tests and quizzes must also be completed within the five school day window after an excused absence. After the five-day window passes, students are no longer allowed to make up the test or quiz. If students arrange extensions with their teachers, the five-day countdown begins after the agreed-upon due date.

    f. Teachers have the option of creating a separate category called "Class Preparation" for homework that is required for participation in the next class meeting (such as reading questions, math problems, etc.…). These assignments are not subject to a separate timeliness grade. These assignments must be completed by their due date or else they will receive no credit. Assignments in this category will not be worth more than 15% of the total grade for the course.

        In this optional category, teachers also have the discretion to take off points for work that is poorly done. For example, students could receive 100% for work that is on time and done well, 60% for work that is on time but done poorly, and 0% for work that is not completed on time.

        Please note: There must always be room for special circumstances for individual students. If there is a valid reason for work being late (such as illness, emotional concerns, etc.…) teachers have the flexibility to offer students an extension on the due dates.

Grading Scale:

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

===== End of Document (next page is for signing)=====

Syllabus signing page – Please return to teacher

AP Computer Science

I look forward to an exciting, productive, and enjoyable year.

Excerpt from the above:
"

Availability and contacting me

I am open blocks 4,5,6 and 7, and plan to be during these times in room 213. I am usually available during these blocks for extra help, and would love to help individual or small groups. Feel free to drop-in. If you want to set a specific date/time to come and see me, email would work well.
Again, I am here to help.

Contacting me: Other than in person, the best way to reach me is through email: zbaharav@kehillah.org . I read emails daily on school-days, and will respond within 24-hours.
"

Important note: This is an AP class, and is expected to require extra effort and time. If you (student and/or parent) have questions about this, please let me know.
For parents: We will address this at back to school night as well.

Please sign and return to teacher:

Student Name (print): _____

Student Signature: _____

Parent Name (print):_____

Parent Signature: _____

===== End of Document =====