AP Computer Science
Kehillah Jewish High School

Dr. Zachi Baharav

Room 213

zbaharav@kehillah.org

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.

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

List of subjects covered

The specific material needed for the AP exam is well defined, and we are expected to cover it by February. We will cover a broader set, introducing the students to more aspects of computer programming.

The order of subjects will be close to the following: Intro; 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; Depending on interest and time, we will cover graphics as well.

Availability and contacting me

I am open on <u>blocks 3,4,5 and 8</u>, and plan to be available during these times in <u>room 213</u>. Feel free to drop-in, or if you want to secure a specific date/time, Schoology message or email would work well. I am here to help.

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

Required Materials

<u>Textbook</u>

1. (recommended only:) "Java Methods", 3rd AP edition, by Maria Litvin and Gary Litvin. Skylight publishing.
2. (required:) We will also purchase, around February, the AP preparation book.

AP test date: Friday, May 17, 2019. Noon.
https://apcentral.collegeboard.org/courses/exam-dates-and-fees/2019-exam-dates

Bring to class each day

1. Computer, Laptop. You can use a school computer, BUT you will need to be consistent with your choice, as we will install the IDE on it.
2. Enthusiasm and willingness to engage in class

Grade Weighting

Formal assessments (tests and quizzes) – 50%
Homework (including challenges) – 45%
Class participation – 5%

Timeliness Policy

You are encouraged to come and talk with me with any special circumstances. Life happens. We will have a lot of homework in the course, and you are expected to follow along in a timely manner.

a. Assignments will be graded for quality and completeness. Late work will earn a maximum of 80%. Late assignments can be turned in up to 5 school days after the due date. After that no credit may be given.
b. 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.

We acknowledge the needs of students with disabilities and will provide accommodations in line with a student's Student Success Plan (SSP) at Kehillah. If you have any questions about your plan, please contact the Center for Learning Success and your teacher.

Class participation

During class, you are expected to take an active part in the process of exploring and practicing. You ALWAYS have the option of saying 'pass' when asked, and skip your turn, and it will not count against you in any way, shape or form. Be sure though that you are not skipping your turn too often. Your answer is not evaluated for correctness, but rather for its intention and involved thought process.

Formal assessments

Advance notice will be given for any formal assessment. Quizzes are short, both in time and in scope. Tests will be cumulative throughout the year.

Collaboration

You are welcome (and are encouraged!) to collaborate on homework, challenges, and class assignments, unless explicitly specified otherwise.
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 encouraged.

Class behavior guidelines

Students are expected to behave according to, and in a manner encouraging, our four commitments. I expect us all to be courteous and respectful to fellow community members. Specific items for my class:
1. Please neither FOOD nor DRINKS in the classroom (during class, or when you come on open-block times).
2. Taking pictures of class material is ok, but no other cell-phone usage.
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.

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

Academic Integrity

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.

===== Next page is signing page =====

<u>Please sign and upload to Schoology (e-sign OK, or a picture of the page):</u>

"I have read and understand the AP Computer Science Syllabus"

Student Signature:

Name (please print): _____

Signature:_____ Date_____

Parent / Guardian Signature:

Name (please print): _____

Signature:_____ Date_____

======= **End** =======