AP Information Night
AP Computer Science A   (aka "AP Comp Sci")

CONTACT INFORMATION:
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RECOMMENDED AP COMPUTER SCIENCE TEST REVIEW BOOK:
TITLE:	Barron's AP Computer Science A, 8th Edition by Roselyn Teukolsky
	(9th edition with 2019-2020 exam changes is due in fall 2019)
COST:	$16.31 new as of 05-29-2019
AMAZON LINK:	https://amzn.to/2W05rA7
ISBN:	ISBN-10: 1438009194 ISBN-13: 978-1438009193

NOTE: **While this book is optional, it is STRONGLY recommended for all students taking the exam, and for those that need extra help.**

WHY SHOULD YOU TAKE COMPUTER SCIENCE?
- Computer Science combines math, science, logic, language arts, and artistic design skills all into one package
- "Everybody in this country should learn how to program a computer because it teaches you how to think." -- *Steve Jobs*
- "What most schools don't teach" video   **https://goo.gl/W6U1Ga**
- Code.org discussion of Computer Science   **http://code.org/promote**
- **"**Three of the Top 10 jobs in OC are in IT…"   **https://goo.gl/BKh62a**

BASIC COURSE CONTENT:
- Karel J Robot, Intro To Java   (03 weeks)
- ICT AP Computer Science A curriculum lessons   (25 weeks)
- AP Picture Lab + AP exam review   (+/- 06 weeks)
- Robotics programming using Finch robots   (+/- 04 weeks, after AP exam)

YOU WILL BE SUCCESSFUL IN AP COMP SCI IF YOU:
- Are willing to think and solve problems for yourself
- Are here every single day without fail, and don't miss often due to "conflicts" during 5th or 6th periods
- Are willing to occasionally struggle with code until you work it out and get it right
- Have a sufficient math and science background. The more, the better!
- Are self-motivated, comfortable with computers, and able to work at a high level of thought
- Lean towards a career in technology, computers, math, science, engineering, etc.
- Know how to study for, and take "problem solving" quizzes

SUMMER HOMEWORK:
There is no specific/required/graded summer homework packet for AP Computer Science. Learning the Java language is best done together in class, where we can deal with errors and problems as a team. **However**, if you have not programmed in the past, or if your math / science / logic skills are not as strong as you would like, consider practicing with one or more of these tutorials. I have listed these in order of preference:

1. **Kahn Academy Intro to JS Drawing and Animation**   **https://bit.ly/1vwAtR0**
   (JavaScript is <u>not</u> Java, but this is a nice intro to programming)

2. **Learn Java 8 – FreeCodeCamp.org video tutorial**   **https://bit.ly/2TJp02i**
   (9+ hour YouTube video, great summary of Java)

3. **CodingBat (Java practice coding problems)**   **http://codingbat.com/java**
   (A great way to practice Java coding, don't do Maps !)

SHOULD FRESHMEN OR SOPHOMORE STUDENTS TAKE THIS CLASS?
This class is open to all YLHS students who are prepared for college level work.
- Has the student taken advanced math and/or science classes?
- Has the student coded in the past at any level, including middle school, calculators, web pages (JavaScript), etc?
- Is the student passionate about technology and computers?
- Is the student planning a career in Computer Science, Networking, App Development, Engineering, Science, etc?
- Is this a STRONG student who adapts well to difficult courses?
- Does the student fully appreciate that this is a college course? Are they ready for college level work now?
- Statistically, most of the students who drop this class are either Freshmen or Seniors
- Priority may be given to Juniors and Seniors if space is limited.

PREVIOUS AP COMPUTER SCIENCE STUDENT SUGGESTIONS:
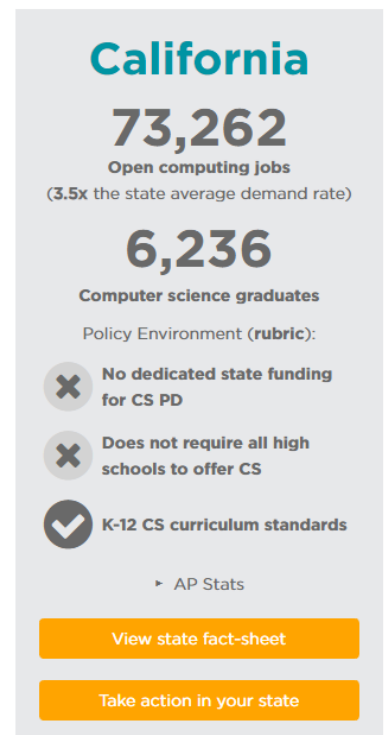**If you could give advice to incoming AP Computer Science students, what would it be?**
- "Study for quizzes"
- "Stay focused"
- "Don't miss class!"
- "Read the project before you do it"
- "Try to solve it on your own before getting help"
- "Don't be afraid to ask Mr. Eliot questions"
- "Take advantage of lunch and after school lab time to get caught up"
- "Walk through the code line by line if you are stuck"
- "Pick a good seat, pick good teams, and groups. Don't talk all period"
- "Be the code, understand the code, defeat the code"
- "Don't underestimate AP Comp Sci. It starts easy, but gets much harder before you know it!"

AP COMPUTER SCIENCE A EXAM INFORMATION:
https://apstudents.collegeboard.org/exam-policies-guidelines/exam-fees
- The 2020 exam cost is $94 if purchased by November 15th
- Exams ordered between November 16th and March 13th have a late fee of $40
- The unused or canceled exam fee is $40
- The **AP Computer Science A** exam is Friday, May 8th, 2020 in the afternoon

YOUR QUESTIONS AND COMMENTS?

California

73,262
Open computing jobs
(**3.5x** the state average demand rate)

6,236
Computer science graduates

Policy Environment (**rubric**):

✗ No dedicated state funding for CS PD

✗ Does not require all high schools to offer CS

✓ K-12 CS curriculum standards

▶ AP Stats

View state fact-sheet

Take action in your state

`https://code.org/promote/`

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May 20, 2019

Subject: Information Regarding College Board Changes to Advanced Placement (AP) Courses and Exams for 2019-2020

Dear PYLUSD Families,

With the 2019-2020 school year quickly approaching, the Placentia-Yorba Linda Unified School District (PYLUSD) wanted to make you aware of mandatory changes regarding Advanced Placement (AP) courses and exams as implemented by the College Board. **These changes involve a new online registration process and new classroom resources, as well as an accelerated deadline to register for AP exams.**

Beginning in August 2019, AP students and teachers will complete a short digital activation process at the start of the school year which will provide access to new classroom resources such as a question bank, unit guides, personal progress checks, and a performance dashboard.

With the introduction of the new student and teacher resources, the College Board is also moving the AP exam registration and ordering timeline from the spring to the fall for the 2019-2020 school year. **Therefore, students enrolled in an AP course who want to participate in the AP exams in May 2020 will register, pay, and commit to taking the exam in October 2019.** There will be additional fees for each exam ordered after the final deadline in the fall and for any exam that is ordered, but not taken.

School administrators will order exams following the new fall deadlines and based on the rosters created through the online registration. School administrators will also receive personalized AP ID registration labels that will be used to connect students' exam materials with their registration information. This eliminates bubbling information circles on the exam and pre-administration sessions.

Why the change? According to the College Board, early commitment to take an AP exam will focus learning on the long-range outcome. Moving the decision to take the exam toward the start of the school year will benefit students and boost the learning culture in AP classrooms. When students commit to the exam from day one, they invest themselves in their classes, partnering with their teacher and classmates to do the daily work necessary to earn a score on the AP exam that qualifies for college credit and/or placement.

PYLUSD students enrolling in AP courses for the 2019-2020 school year should be prepared for the new October 2019 registration and payment with early commitment to participate in the May 2020 exams.

Be on the lookout for additional information regarding AP courses and exams from your respective high school in Summer 2019. If you wish to learn more in the meantime, please visit the College Board's AP Central online at https://apcentral.collegeboard.org.

Preparing Every Student For Success Now And In The Future