



South Pasadena High School

1401 Freemont
South Pasadena, CA 91030
(626) 441-5820



Mission Statement

The mission of South Pasadena High School is to empower/enable students to think critically and creatively, communicate effectively, solve problems, set and reach goals, and work cooperatively and independently as responsible citizens of the community. Staff, students, parents, and community member collaborate in assisting students to meet these goals.

Instructor: Mr. Shorr	Website: http://mistershorr.com
Course: AP Computer Science A	Email: gshorr+apcsa@spusd.net
Room: 417	School Website: http://www.sphstigers.org/
Phone (for voice messages before or after school only): (626) 441-5820 ext 2417	

Course Description

The AP Computer Science A course allows all students to explore programming through problem solving. It also provides extra time to explore non-AP topics that students find interesting and motivational such as graphical interfaces. Students learn to design and implement computer-based solutions to problems in a variety of application areas. In solving these problems, students develop, select, and implement appropriate algorithms and data structures.

The object-oriented paradigm is used to problem solve using the Java programming language. Students read, interpret, and instantiate standard Java library classes from the AP Java subset. Reading, understanding, and appropriately modifying large programs like the Magpie and Pixlab Case Studies consisting of several classes and interacting objects are also requirements of this course.

While the Horstmann text is the main resource for students, the course employs a spiraling approach to concept presentation and exploration using case studies developed by the College Board. Additionally, students use the Udacity Introduction to Programming course as a video supplement to the text; the Udacity course is presented by the author of this course's main text, Cay Horstmann. Students get an initial introduction to many topics through Udacity, and can also revisit troublesome topics or advance ahead, practicing self-paced learning, an essential skill in the Computer Science field.

Algorithmic thinking and problem solving is enhanced through the use of the Javabat website created by Nick Parlante. Topics are revisited throughout the course in a more formal way to reinforce key concepts and deepen student understanding. Finally, articles related to recent events motivate discussions of social and ethical implications of programming and computer use.

Grading Breakdown

Students' grades will be determined by the average scores of the following tasks:

Exams	60%	Homework/Assignments	10%
Projects	10%	Quizzes.....	15%
	Mini-quizzes.....		5%

Students and parents will be able to check their progress at any time on Aeries. I try to keep Aeries up to date, but at any given time the displayed grade may not include the most recent assignments.

Grading Scale

A.....90% - 100%

B.....80% - 89%

C.....70% - 79%

D.....60% - 69%

F.....59% and below

Classroom Expectations and Rules

The expectation is that students are respectful, responsible, and ready each day. The rules are: (1) follow directions, (2) speak respectfully, (3) keep hands, feet, and objects to oneself, (4) no food or drink in the lab, especially at the computers, (5) bring necessary materials daily, (6) treat computers and other classroom equipment with respect, (7) follow all other standard school rules as outlined in the student hand book. This is an AP course so I expect none of these to be an issue. Students will be engaged in learning throughout the course through pair programming, whole class short-answer response on Google Spreadsheet, and other Common Core relevant techniques.

Homework

Homework mostly consists of Udacity assignments or reading from the textbook and answering review questions. Assignments will generally be scored between 0 and 10 based on completion and/or correctness. Most homework is submitted on Piazza or via Dropbox.

Missing, Make-up, and Late Assignments and Test

- Some leeway may be given for late homework *only* if I am contacted well before the due date. Otherwise, late work will count for half credit *up until the day of the exam*.
- Students with **EXCUSED** ABSENCES and TARDIES can make-up unit exams and assignments within 2-3 days of returning to school.

Supplies

The following supplies are strongly recommended for success in this course; for assistance acquiring these, please speak to me personally after class and we can work something out.

- Pencil & paper for note-taking
- Computer access outside the classroom (home or school library)
- Barron's AP Computer Science A Review Book 7th Edition (ISBN-10: **1438005946**)
 - Though not required, I very strongly recommend acquiring this book as it is a great review of the material prior to the exam

Website

Homework and other important documents will be available on the school website, which links to my website. To go directly to my website, visit <http://mistershorr.com> and click on the APCSA tab. On the page, there will be links to the Piazza learning management site and a course calendar. Clicking on any event on the calendar will bring up more details. A snapshot of the homework with due date will be available on the course calendar, with more detailed descriptions posted on Piazza.

The Piazza learning management system is integral to the course. Students will be able to ask questions to get homework help from their classmates and me. Note that students have access to computers at various locations on campus.

I hereby affirm that I have read the 2016-17 APCSA syllabus and will do my best to make this year a successful one.

Student Name

Student Signature

Parent/Guardian Name

Parent/Guardian Signature

Parent/Guardian Preferred Email
(if different from one given to the school)