

## Homestead High School – Mathematics Department – Course Information Sheet 2020 – 21

**Course Title:** AP Computer Science A

**Course Instructors:** John Shelby

**Textbook:** Big Java; ISBN: 978-0471402480  
Java Methods A & AB; ISBN: 978-0972705578

### Course Objectives:

APCS is a college level course in Introductory Computer Science. The course assumes basic programming skills, and extends these skills by covering topics such as use of compilers/debuggers/documentation tools, coding syntax, advanced algorithms, program design theory, and data structures. Work is focused toward gaining the skills necessary to successfully complete the Computer Science AP exam in the Spring.

### Topics Covered:

- Data and Types
- Class and Library Design
- Control Structures and Formal Logic
- Loops and Recursive Algorithms
- Arrays and ArrayLists
- Exceptions, I/O, and Computer Resources
- Advanced Inheritance and Program Design
- Searching and Sorting/Data Structures
- Team and Project-based coding

### Academic Honesty:

- Students are expected to demonstrate a high degree of integrity and adhere to the [FUHSD Academic Honesty Policy](#).
- Work turned in for credit should be the students own original work.
- Sharing or receiving information about any assessment prior to all students' completion is a serious offense.
- Using unauthorized aides, will be considered a serious offense.
- Any act of cheating will be treated as serious and all students involved will receive **no credit** on the assessment/assignment.
- Help from a classmate, parent, or online source must be attributed. This means that students *must* communicate exactly what type of help was received from an outside source.

### Grading Information:

Grade Weighting (same categories used in Schoology):

- Collaboration 5%
- Lab/Assignment 35%
- Tests & Quizzes 60%

Grading Scale:

- A = 90–100%
- B = 80–89%
- C = 70–79%
- D = 60–69%
- F = below 60%

Grade Reporting:

- All grades will be posted via Schoology.
- Grades will be updated throughout each progress period.

### Tests or Exams:

- Each course unit consists of 2 quizzes, and a summative test.
- A cumulative final exam is given each semester.
- In May, the Computer Science AP Exam is offered to all students, but is not graded as a component of the course.

### Homework:

- Written planning or practice exercises prepare for coding assignments and reinforce technical concepts.
- Programming time is given in-class, but students typically need additional outside time to complete lab work. Deadlines and materials posted in class and on Schoology.

### Late Work / Make Ups / Retake Policies:

- Quizzes can be retaken within the unit to improve scores.
- No retakes of tests offered in this course.
- Assignments lose their value as lab preparation or fuel for group discussion when submitted late, and are accepted at only half credit.

### Extra Credit:

- No extra credit given in this college-level course.

• Homestead Prepares Students to be • Communicators • Critical Thinkers • Continuous Learners • Collaborators •