# COMPUTER SCIENCE A YEAR-LONG COURSE A-G APPROVED

### **INSTRUCTOR: STAN TWITCHELL** SHASTA COLLEGE DUAL ENROLLED

#### Show me the money:

Computing careers are the most plentiful, in demand and among the highest paying jobs in our country. The tech industry currently cannot find enough qualified employees to fill jobs and they are recruiting employees from overseas. Skills taught in this course prepare students in a field hungry for qualified American employees and begins a pathway to incredible opportunity.

#### Overview: The BIG picture.

The Computer Science A curriculum framework specifies the concepts and computational thinking practices central to the discipline of computer science, and is organized around fundamental principles essential to thrive in future college courses and a variety of computing and STEM careers. Students will become fluent in Java programming language, Android Studio and be prepared to take the AP CS test.

#### The Curriculum:

Unit I - Beginning Java and Object Oriented Programming with Greenfoot Unit II - Java: Editors, Compilers, Data types, Branching decisions, Loops Unit III - Android App Development using Java and Android Studio Unit IV - Java: Methods, Arrays, Array Lists Unit V - Java: Input/Output, Read from and Write to files, Exceptions Unit VI - Classes, Object Oriented Programming Unit VII - Android Studio: API's, App Development and Deployment

## 

This course is challenging but I believe all students and learn computational thinking and programming. I believe concepts delivered in this course are extremely beneficial and directly relate to the number 1 job industry in the USA.

### Shasta College Dual Enrollment:

This class is dual enrolled with Shasta College's CIS 62 Java Programming.

That means students can enroll for free and receive college credits that are transferable to many 4 year institutions. Please take advantage of this incredible opportunity to get ahead in college.

**Grading:** All points are earned from projects and quizzes: 90%↑=A, 80%↑=B, 70%↑=C, 60%↑=D

#### Finally!!! About the instructor.

I have worked hard the past few years learning 4 programming languages online and at summer trainings in programming and robotics. I want to be able to offer these skills to our students. I strongly believe this field gives a diverse population a great start to what could be an amazing career. Please sign below. On the comment line, write something that proves you are not a robot. *(and you read this)* Thanks,

Stan Twitchell stwitchell@rbhsd.org

Student Signature

Parent Signature \_\_\_\_\_ Comment \_\_\_\_\_