#### EXPLORING COMPUTER SCIENCE

SEMESTER-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 Exploring Computer Science curriculum 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. This course also prepares students for RBHS pathway CS classes: Computer Science Principles, Computer Science A and Cisco A+ Academy.

### **The Curriculum:**

Unit I - 3D Modeling, Design and Printing with SketchUp, Tinkercad and Makerbot

Unit II - Programming Languages: Introduction to JavaScript

Unit III - Introduction to Electronics and Arduino Breadboards

Unit IV - Introduction to Robotics and Programming with RobotC

Unit V - Introduction to Game Design and Scripting with Unity and CSharp

# PLEASE READ THIS ENTIRE DOCUMENT!!!!!!!!!!

This course is fun and at times challenging but I believe all students and learn computational thinking and programming. No prior knowledge is needed. The concepts introduced 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 02 Intro to Computer Science.

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 guizzes: 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	
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Student Signature	Parent Signature
	Comment