# Web Apps & Coding Syllabus Bellevue High School

"We believe real-world learning opportunities build passionate and engaging experiences for student success in life."

Class: Web Apps & Coding

**Grades**: 9-12

Subject Area (ELA, Math, Science, Social Studies, Fine Arts, CTE etc.): CTE Business, Computer Science

<u>Course Overview / Goals for Class:</u> Computer Science Discoveries (CS Discoveries) is an introductory computer science course that empowers students to create authentic artifacts and engage with computer science as a medium for creativity, communication, problem solving, and fun.

**Essential Learnings - Big Ideas:** How can I use computer applications to solve real-world problems?

### CSTA K-12 Computer Science Standards (2017)

#### AP - Algorithms & Programming

- 1B-AP-11 Decompose (break down) problems into smaller, manageable subproblems to facilitate the program development process.
- 1B-AP-12 Modify, remix or incorporate portions of an existing program into one's own work, to develop something new or add more advanced features.
- 1B-AP-14 Observe intellectual property rights and give appropriate attribution when creating or remixing programs.
- 1B-AP-15 Test and debug (identify and fix errors) a program or algorithm to ensure it runs as intended.
- 1B-AP-16 Take on varying roles, with teacher guidance, when collaborating with peers during the design, implementation and review stages of program development.
- 2-AP-10 Use flowcharts and/or pseudocode to address complex problems as algorithms.
- 2-AP-11 Create clearly named variables that represent different data types and perform operations on their values.
- 2-AP-12 Design and iteratively develop programs that combine control structures, including nested loops and compound conditionals.
- 2-AP-13 Decompose problems and subproblems into parts to facilitate the design, implementation, and review of programs.

- 2-AP-14 Create procedures with parameters to organize code and make it easier to reuse.
- 2-AP-15 Seek and incorporate feedback from team members and users to refine a solution that meets user needs.
- 2-AP-16 Incorporate existing code, media, and libraries into original programs, and give attribution.
- 2-AP-17 Systematically test and refine programs using a range of test cases.
- 2-AP-18 Distribute tasks and maintain a project timeline when collaboratively developing computational artifacts.
- 2-AP-19 Document programs in order to make them easier to follow, test, and debug. 3A-AP-20 Evaluate licenses that limit or restrict use of computational artifacts when using resources such as libraries.

# IC - Impacts of Computing

- 1B-IC-20 Seek diverse perspectives for the purpose of improving computational artifacts.
- 1B-IC-21 Use public domain or creative commons media and refrain from copying or using material created by others without permission.
- 2-IC-23 Describe tradeoffs between allowing information to be public and keeping information private and secure.
- 2-IC-21 Discuss issues of bias and accessibility in the design of existing technologies.

# <u>Grading System - Content / Process - other important information (reassessment, homework, etc.)</u>

70% Tests & Projects 30% Daily Work, Practice, & Homework

A+	100%	C+	78-79%
Α	92-99	С	72-77
A-	90-91	C-	70-71
B+	88-89	D+	68-69
В	82-87	D	62-67
B-	80-81	D-	60-61
		F	59 or lower

# **Classroom Expectations - policies**

Show up. Work together. Be resourceful & find a

Be on time. Ask for help. way.

Show initiative. Help others.

#### Late Work:

There will be a set deadline for turning in late work each quarter, students will not be allowed to turn in late assignments after that deadline.

# Make Up Work:

When students are absent, they are accountable for turning in assignments the next day they return to class. If the work is not made up within three days, based on the number of days absent.

# **Cheating & Plagarism:**

- Cheating from another student, book, and notes are a major offense. If caught cheating the student will lose credit for the work. If a student is caught cheating with another student, BOTH students will lose credit.
- Plagiarism is when a student does not give credit to an author or producer of a
  piece of work (i.e. music, books, magazines, websites, etc.) If a student is caught
  plagiarizing the student will lose credit for their work. This is an easy punishment
  (Colleges today, kick students out for plagiarism)

# **Technology:**

We will be utilizing Google Classroom everyday in our classroom. Inappropriate use of technology will lead to 0/9th Block

# Instructor contact information and availability

tracyweber@bellevue.k12.ia.us 563 663 1344

Other information the instructor deems important