Computer Science Independent Study 2

Mr. Joe Cusack Jcusack1@kleinisd.net Room 502 / Klein Collins High School Computer Science instructor (832) 484-5500 Ext 45246 Mr. Cusack's Web site: www.joecusack.com Course: 4908 / IND STU Comp Sci 2	**Prerequisite:** Proficiency in the knowledge and skills relating to Technology Applications and at least one computer science class and Mr. Cusack approval. **Required Course Supplies:** Pencils and Paper everyday **Major exam test Day:** Friday

Course Description:

The students will have had independent study 2. Their project will be much more advanced. Students pursue self-directed learning on specific topics related to Computer Science. They work on hands-on projects, receive guidance from the teacher, and may collaborate with peers. Assessment includes presentations and demonstrations, focusing on practical application rather than standardized testing. Periodically, I will work with students in the exploration of the latest trends in computer science such AI and Machine Learning, Quantum Computing, Internet of Things (IoT), Cybersecurity, Data Science and Big Data, Cloud Computing, Augmented Reality (AR) and Virtual Reality (VR), Edge Computing, Blockchain and Cryptocurrencies, and Robotics and Automation.

Late Work Guidelines	Re-teach/Re-test Procedure.	Textbook
-10 points off each day late Active participation and group collaboration Will be evaluated and given a grade. **Tutorials:** Usually 6:15 am till the start of school every morning.	Review material and test corrections, Re-take test within 5 days, Replacement grade may not exceed 70, Re-test policy does not apply to major projects. The Klein Collins HS Grade Repair Policy does not apply to this course	*Blown to Bits:* Your Life, Liberty, and Happiness after the Digital Explosion 1st Edition by Hal Abelson (Author), Ken Ledeen (Author), Harry Lewis (Author) – Free online

Online Resources used: Khan Academy https://www.khanacademy.org/ W3School https://www.w3schools.com/ Code.org: Learn today, build a brighter tomorrow. https://code.org/ Amazon Future Engineer- Project STEM program https://projectstem.org/users/sign_in	**Student Absence Procedures** One day to make up work for each day absent **Grades:** 9-12 .5 Credit **Grade replacement:** I offer grade replacement for an assignment. If a student competes on my Computer Science UIL team. I will replace a minor or major grade with a 100. Minor grade replacement for any ranking in the contest. Major grades replacement will happen if the student makes a grade of 75 or more on the UIL test (Perfect score 240). No limit to the number of contests you can attend. Replacement grade must be used in the current grading period.