Digital Electronics

Level of Difficulty	Estimated Homework	Prerequisites
Moderate **Difficult** Very Difficult	0 - 30 minutes	**District**: NONE **Department:** Recommendation: Introduction to Engineering Techniques or AP Computer Science A or AP Computer Science Principles

Course Description

Digital Electronics is the study of electronic circuits that are used to process and control digital signals. In contrast to analog electronics, where information is represented by a continuously varying voltage, digital signals are represented by two discreet voltages or logic levels. This distinction allows for greater signal speed and storage capabilities and has revolutionized the world electronics. Digital electronics is the foundation of all modern electronic devices such as cellular phones, multimedia players, laptop computers, digital cameras, high definition televisions, etc. The major focus of the DE course is to expose students to the design process of combinational and sequential logic design, teamwork, communication methods, engineering standards, and technical documentation.

Grading

Participation - 30%. Journal entries completed daily and collected at the end of each week. On task during class working on game assignments and projects.
Assignments and Quizzes – 15%
Worksheets, Exercises, & Tutorials Projects and Assessments – 40%
Final Exam – 15%

Syllabus Link
- SDA - www.sdaengineering.org
- CCA - Tony Mauro

Supplemental Information
➔ 10 credits
➔ Meets UC/CSU G elective credit
➔ Meets high school graduation requirement for Practical Art/CTE or elective credits