**Contact Information Best Time to Contact:**

**Mrs. O’Grady-Cunniff 7:00am – 4:00 pm**

**Email:** **dOGrady-Cunniff@ccboe.com** **WEBSITE: mrs-o-c.com**

**Phone: 301-753-1754 ROOM: S207**

# Course Description

**Prerequisite:** Completion of PLTW Principles of Engineering

From smartphones to appliances, digital circuits are all around us. This course provides a foundation for students who are interested in electrical engineering, electronics, or circuit design. Students study topics such as combinational and sequential logic and are exposed to circuit design tools used in industry, including logic gates, integrated circuits, and programmable logic devices.. This is an honors level course with expectations of above average effort. PLTW is a not for profit educational program that assists high school students in developing strong backgrounds in engineering. For more information visit pltw.org

# Course Objectives

Students will be able to describe features of electronic circuits and design circuits for applications.

Students will be able to solve complex problems and build circuits using logic, hardware and software

**TUTORING**

Tutoring is available in my room, S207, during A shift of PRIDE time. Students are strongly encouraged to use this time if they have work to catch up on.

**Materials**

Students need paper and pen or pencil.

**Course Requirements and Classroom Rules**

Be respectful of yourself, others, and the school rules and property. Use class time wisely. Turn work in on time, late work will receive 80% credit if received one day late without an excused absence and 50% credit if turned in within a week.

**Classwork & Homework**

Students are expected to uphold the school’s standard of conduct relating to academic honesty. Students assume full responsibility for the content and integrity of the academic work they submit. The guiding principle of academic integrity shall be that a student's submitted work, examinations, reports, and projects must be that of the student's own work. Homework may be assigned once a week.

**Attendance policies and procedures**

It is important for our students’ success that they make every effort to be in school and class every day and on time.  A student who is absent from school has three (3) days to bring in a written lawful absence excuse signed by his or her guardian or doctor.  Failure to bring in a written lawful absence note will result in an unlawful notice.  Students who receive two (2) unlawful absence notices in a course during a quarter may receive a failing grade for that subject for the nine (9) week marking period.

In addition, students are to be in class on time.  If a student is unexcused tardy to a class three (3) times, he/she will receive a warning and the parent will be contacted.  Upon the sixth (6th) tardy, students may be assigned a disciplinary consequence by the appropriate administrator. A student may receive additional

disciplinary action if he/she continues to be unexcused absent or tardy after the second (2nd) notice has been issued for that quarter

# This is a project-based course, so good attendance and effort are crucial. Warm-up assignments are due every day, and must be submitted for grading immediately after an excused absence. Please see the policy from the Student Handbook.

**Course Schedule**

Quarter 1: Foundations of Electronics and the Digital World.

Quarter 2: Combinational Logic

 Quarter 3: Sequential Logic

Quarter 4: Microcontrollers

**Grading Policy**

Student grades will be based on both product and process assessments in accordance with the Charles County High School grading policy for Honors level courses.

A letter grade will be determined by the following criteria:

|  |  |
| --- | --- |
| Process | 50% |
| Warm-up/ Journal Entries | 15% |
| Classwork and Participation | 35% |
| Product | 50% |
| Performance Tasks | 30% |
| Tests (Quarterly and quizzes) | 20% |

If a student does not turn an assignment in (process or product), then they earn a score of NHI, which equals a zero. If a student completes and turns in

an assignment (product or process) and earns a score less than 50%, a score of “F” will be entered in Synergy which will give the student 50% of the points.

**Grading Scale**

|  |  |
| --- | --- |
| Grade | Percentage |
| A | 90% - 100% |
| B | 80% - 89% |
| C | 70% - 79% |
| D | 60% - 69%  |
| F | 59% - 50% |

**For the Parents/Guardians to sign:**

I have read and understand the grading, attendance and classroom policy for PLTW Digital Electronics - Honors. I have discussed with my child the importance of going to class on time, following the classroom rules and staying on task to complete the required work. I also understand that regular attendance is critical to their success.

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Student Signature Date

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Parent/Guardian Signature Date

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Parent/Guardian Email Address

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Parent/Guardian Preferred Phone