ELECTRICITY & ELECTRONICS SYLLABUS

2016-17 SCHOOL YEAR

INSTRUCTOR:
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MY SCHEDULE:

Advisory	9:08-9:18
1st Block-Electricity & Electronics	9:20-10:40
Mini Block-Astronomy	10:42-11:07
2nd Block-Physics 1	11:09-12:29
Lunch – 12:29 – 12:55	
3rd Block Planning/Academic Lab	12:55-2:17
4th Block-Physics by Design	2:19-3:45

ELECTRICITY & ELECTRONICS: The course will be divided into 3 different components during the school year. First students will learn the basics of electricity including voltage, current, resistance, series and parallel circuits. Next, students will study Robotics, build and design robots as well as learn basic programming to solve a maze challenge. Finally, students will study Electronics using breadboards, multi-meters, and learn circuit components including capacitors, potentiometers, transistors and LEDs. Each student will build electronics projects and submit their work to Schoology. All students will keep a physics notebook to record the progression of our work through photographs, discussions, and daily reflections.

GRADES: Grades will be divided into 4 components of equal weight. These 4 components include 25% Notebook work, 25% daily assignments, 15% participation, and 35 % Assessments including quizzes, projects, & tests.

1) **Notebooks** - Each student will create an electronics notebook. This notebook will include electronics labs, diagrams, and notes, all robotics designs, and electronics diagrams. It will be graded every week.
2) **Assignments** - Each student will be expected to complete all daily assignments and turn them in before the end of class. Most daily assignments will be worth 5 or 10 points and be graded on accuracy.
3) **Participation**- In electronics class, participation is the most important thing a student can do for individual and team success. Students may earn 20 participation points each week by getting to class, being on time, turning off cell phones, and engaging in class.
4) **Assessments** - Students will complete a variety of assessments in this course. The assessments will include quizzes, tests, and electronics projects throughout this course. These projects will be used as both an ongoing and final assessment of student understanding of electronics.

PLEASE RESPECT THE SPACE: We will use a variety of electronics materials in class every day. These electronics can be sensitive and may be easily broken. All students will have their own electronics board, circuit materials, and battery to use in class. The electronics materials need to be used carefully and returned to storage so they remain intact throughout this class.

In addition, please don't plan to eat in the physics classroom. Please **do not** bring food into the physics classroom so plan to eat before you come into class. **Get breakfast during advisory** and **make plans for lunch each day** so you don't get hungry. This will help keep the physics classroom and lab materials clean, free of bugs, and ready for labs each day. In addition, you may bring in a water bottle with a lid. This will let you get a drink while protecting all the lab materials and technology in class.

CLASS EXPECTATIONS:
Be here EVERYDAY!
Do YOUR Best!
Be RESPECTFUL!
Be ON TIME!

ELECTRONIC DEVICES: Cell phones will not be used in physics class without permission. If you choose to use your phone during class without permission, I will ask once that the phone be put away. If you do not choose to put the phone away, you will be asked to sign out, take the phone to the office and drop it off with Suzette, and then return to class. You may pick up your phone after class.