**Robotics Syllabus 2018-2019**

**Mrs. Hawkins**

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Students will start off learning about engineering and engineering problem solving. Students will learn, understand and know the following -

How to collaborate in groups and teams

How to design robots for specific activities and scenarios

How to use RobotC programming software

Other topics include safety, motor control, gear ratios, torque, friction, sensors, timing, program loops, logic gates, decision-making, timing sequences, propulsion systems and binary number systems.

How to use the engineering design process to complete robotic activities and challenges.

Students will have an opportunity to participate in competitive events, through VEX, BEST, and Skills USA.

Students will be expected to be attentive, polite, and respectful to others during class. All students will be treated as young adults and respected as such. Students will be expected to bring their tools for work (pencil, paper, and notebook). Developing responsibility is important for success. Disrespect to anyone in my classroom will not be tolerated. Students will be expected to follow all rules stated in the Student Handbook.

**Classwork:**

Students will work mostly on work during class time. They will be expected to work with a partner or in small groups, learning to work in a team atmosphere is a big part of Robotics. All students are expected to participate, and will be graded accordingly. A large portion of their assignments will be project based which will be graded in a variety of ways; some will be treated as formative assessments so it is extremely important that they complete them. Students will be graded daily on their participation, which includes work ethic, as well as short quizzes, practice problems, and challenges.

**Grading Procedures**

40% - Formative Assessments 60% Daily Work and Quizzes

**Absences**

Attendance is critical for a student to be successful. If a student is absent, it is the student’s responsibility to make up the missed assignment, formal assessment, or quiz. Getting behind in a project based class is hard to recover from, so the student should use a friend in class or come to tutorials for help.

**Tardies**

It is extremely important that students get to their classes in a timely manner. It is disruptive to a class for students to enter late. Students will receive a warning for their first tardy. Students will receive detention on the second and third tardies. Detentions are to be 15 minutes before or after school. After the fourth offense, disciplinary actions will be taken and the student will be assigned ISS.

**Conference and Tutorial Times**

Conference: 2nd period: 9:00 – 9:45 Tutorials: Before or after school

**Materials Needed** - Composition notebook with graph paper Pencil or Pen