



**Mr. Ramirez**

**COURSE DESCRIPTION**

This is a beginning course in robotics. We will be utilizing VEX IQ Robot kits, Graphical RobotC programming software and various VEX IQ Robotics materials. The objective of this course is to introduce the student to basic programming as well as problem solving strategies. This course will involve students in the development, building and programming of VEX IQ robots. Students will work hands-on in teams to design, build, program and document their progress. Topics may include motor control, gear ratios, torque, friction, sensors, timing, program loops, logic gates, decision-making, timing sequences, propulsion systems and binary number systems. Student designed robots will be programmed to compete in various events (at least 1) throughout the schoolyear.

I hope that this class will provide motivation for students to continue in computer science and engineering courses.

**CLASS RULES AND EXPECTATIONS**

- 1. Be Prompt
- 2. Be Polite
- 3. Be Prepared
- 4. Be Productive

**COMPUTER HARDWARE AND SOFTWARE**

All students will be expected to take care of and respect all school computer hardware and software while in their use. Students will have access to laptop computers, RobotC software and VEX IQ Robotics kits. Damages to any computer equipment by a student will be charged to the student.

**VEX IQ KITS**

Each VEX IQ kit will be inventoried by each group before and after each trimester. You as the student are responsible for all the pieces, parts, batteries, booklets and any other materials that are needed to complete your kit. Any pieces lost or missing from your kit will be charged to you as the student. Please be very careful of your kits as they are expensive and can be costly to replace missing pieces.

**GRADING SCALE**

<b>Academic</b>	<b>Effort</b>	<b>Behavior</b>
<b>A</b> 3.50 - 4.00 (90 – 100%)	1 Outstanding	Excellent
<b>B</b> 2.50 – 3.49 (80 – 89%)	1 or 2	Good
<b>C</b> 1.50 – 2.49 (70 – 79 %)	2 Sufficient	Average
<b>D</b> 1.00 – 1.49 (60 – 69%)	3 Insufficient	Unsatisfactory
<b>F</b> 0.00 – 0.99 (0 – 59%)	3 Insufficient	Unacceptable

Parent signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Student signature: \_\_\_\_\_ Date: \_\_\_\_\_