
ROBOTICS



Ms. Nikki
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OBJECTIVE

Learn to work together in groups and learn the basic skills of building and operating robots.

CLASS RULES

1. Students are expected to pay attention & stay on task.
 2. Respect and take care of all school robotics kits & computer hardware & software.
 3. Keep hands clean when using computers & robotics kits.
 4. No food or drinks allowed in the Media Center.
 5. All iPads must be put away at all times unless stated otherwise.
 6. Computers are to be used for programming robots only.
 7. Students are expected to follow all school policies as outlined in the 2017–2018 Student handbook.
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CONSEQUENCES/DISCIPLINE

All school policies are followed in this classroom & enforced with the guidelines in the 2017-2018 Student handbook.

COURSE DESCRIPTION

Robotics is an elective course for 6th, 7th, and 8th grade. In this course, students will design and build VEX IQ Robots. Once designed, robots will be able to do simple tasks and be operated by the students.

CURRICULUM OUTLINE

Unit A: It's Your Future – Learn about STEM, engineering, and robotics
Unit B: Let's Get Started – Learn about VEX IQ, the Controller, and the Robot Brain
Unit C: Your First Robot – Build and test Clawbot IQ
Unit D: Simple Machines & Motion – Explore Levers, Pulleys, Pendulums, & more
Unit E: Chain Reaction Challenge – Design fun devices using Simple Machines
Unit F: Key Concepts – Explore and apply science and math that engineers use
Unit G: Mechanisms – Motors, Gear Ratio, Drivetrains, Object Manipulation & more
Unit H: Highrise Challenge – Build a challenge-ready teleoperated robot
Unit I: Smart Machines – Learn how sensors work and the basics of programming
Unit J: Chain Reaction Programming Challenge – Apply sensor and programming knowledge to automate fun devices
Unit K: Smarter Machines – Expand your knowledge of sensors and programming
Unit L: Highrise Programming Challenge – Build a challenge-ready autonomous robot

GRADES

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| Building performance based on self, peer, and teacher observations | 25% |
| Programming based on clear documentation & effort | 25% |
| Challenges readiness & completion of given tasks | 25% |
| Quizzes/Tests | 25% |



Today's Assignment:

Please take this syllabus home for you and your parents to read over and understand.

Return this page with the following information filled out completely.

Thank you!

Student's Name:

(print please)

Parent's Name:

(print please)

Parent Signature:

Date:

