



Robotics Technology Syllabus Mr. Hunter

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Course Description

Robotics at MVHS is set up to serve two different purposes. Robotics I students will be working on designing, building, and programming smaller robots to complete various tasks throughout the year. All students will use VEX, VEX IQ, RobotC and Virtual Worlds to learn about designing, building and programming their robots. Robotics II students have chosen to work on a robot in which they will compete against other schools in Southern California and from around the world. The robotics program is entering its twelfth year of existence at MVHS. Over the past eleven years we have achieved a great deal of success including: Traveling to 4 different states in addition to both Southern and Northern CA, winning the 2012 VEX Robotics World Championship, and winning the 2015 CA State Championship. We look forward to more successes this year as well.

Course Objectives

Upon satisfactory completion of this course the students will be able to:

- ✂ Develop knowledge and competency to understanding how the information learned during math, physics, and science can be applied.
- ✂ Demonstrate skillful use of robots and automation devices for application in construction, communication, energy, and manufacturing.
- ✂ Solve problems related to the design and production of specific robots.
- ✂ Understand and demonstrate skillful use of electronics and the principles associated with them.

Course Activities:

- ✂ Lecture and Class Discussion
- ✂ Assigned Readings
- ✂ Laboratory Activities
- ✂ Robot Design and Production
- ✂ Working with Autonomous Robots

Attendance:

Attendance is **very important** due to the amount of material being covered and limited lab time available. Missing classes will greatly affect the ability to finish lab projects in a timely manner. You will also be letting down your lab partner. It is the student's responsibility to find out what information and work was missed during a class.

Methods of Evaluation

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|---------------------------------|-----|
| ✂ Robotics Lab Work | 60% |
| ✂ Reports, Quizzes, Tests, etc. | 20% |
| ✂ Class Participation | 10% |
| ✂ Final Exam | 10% |

Grading Details

Robotics assignments are evaluated for accuracy, completeness, creativity, engineering design, and how your team has accomplished the specific task. Reading assignments, worksheets,

quizzes, and other written work are graded based on the total points available for that assignment. Participation points are based on attendance, punctuality, reliability, safety, cleanup, participation and attitude.

Grading Scale					
A+	97.00 – 100	B+	87.00 – 89.49	C+	77.00 – 79.49
A	92.50 – 96.99	B	82.50 – 86.99	C	72.50 – 76.99
A-	89.50 – 92.49	B-	79.50 – 82.49	C-	69.50 – 72.49
				D+	67.00 – 69.49
				D	62.50 – 66.99
				D-	59.50 – 62.49
				F	0 – 59.49

MAKE-UP WORK POLICY:

Students will be given no more than one week to complete an assignment before it would be considered late. It is the student's responsibility to follow through, complete assignments and submit by the due date.

Students can make up assignments at home, during class, and after school. Assignments not completed within the 6 week grading period will not be accepted at a later date!

LATE WORK / ASSIGNMENT POLICY:

Late work must be submitted within each six-week grading period that it is assigned. Students will be reminded of missing assignments during the class period and are encouraged to check ABI to verify scores and their current grade.

If assignments are not turned in on time, the following grading system will apply:

- One day late - minus one letter grade (from total score)
- Two days - minus two letter grades (from total score)
- Three days late or more – half of the total score

Students are responsible for and should not discard any assignments until the final grade has been **posted in Aeries**.

*Students can make arrangements to come in before and/or after school to make up work. I am usually here before school by 7:00 a.m. and stay after school M, W, F until 3:30 p.m.

ACADEMIC HONESTY STATEMENT

Academic dishonesty includes but is not limited to: cheating, copying from other sources (on-line courses, any Internet site), homework turning in work done by parents, projects, tests, notes, using notes without permission, forging, altering or duplicating school or teacher documents or signatures, plagiarism and text messaging regarding test data or information. The 'I' (Integrity) from our school's motto, will be enforced.

Engineering Notebook

You are responsible for keeping an **Online Engineering Notebook using OneNote** that requires multiple daily entries throughout the week. **Everything** you do in this class **will be detailed** in your Engineering Notebook - includes "snips" of code and Virtual Worlds along with notes from video lessons. This Notebook will be checked often to make sure you are using the Engineering Notebook correctly. This notebook will **log everything you do and is a significant part** of your grade.

Behavior That Justifies Lowering A Citizenship Grade:

- ✖ Does not show respect for school property
- ✖ Does not show respect for others
- ✖ Uses profanity or other vulgar language
- ✖ Exhibits untrustworthiness
- ✖ Truancy
- ✖ Violates classroom rules

Rules and Procedures

- ✖ Be in your seat and quiet at the beginning of class ready for the Warm Up.
- ✖ Do not throw things in the classroom.
- ✖ No eating, drinking or CHEWING GUM in class.
- ✖ Clean up after yourself.
- ✖ Do not disrespect others.
- ✖ Talking or interrupting during lectures will not be tolerated.
- ✖ There will be no gathering by the door before the bell rings. Everyone must be in his or her own seat and all trash should be picked up before you leave. There is no exception to this rule.

Expectations

All students are expected to come to class each day prepared to succeed. It is absolutely necessary to stay on task so that you can complete all assignments in a timely manner. Students must stay in their assigned seats and work in a quiet manner so as to not disturb others. Loud talking, moving about randomly is not acceptable. No students are to leave the classroom without written permission.

Please be advised that we will be using materials that cost a great deal of money. These materials which include laptops, robotics kits, tools, software, etc. are expected to be cared for and taken care of. The cost of any damage to the materials used in this class will be passed on to the student if the materials are being used inappropriately.

Homework Assignment Due by 11:59pm Tuesday for 5 BONUS points

In an effort to go paperless your parent will send me an email stating that they have looked over the course syllabus with you.

Directions –

1. Please have one of your parents send me an email to cdhunter@murrieta.k12.ca.us with **your period, first, and last name** in the subject line.
2. **Example** – 2 Sarah Snyder
3. Please have your parent include their contact info including email (if different from one they are sending from) and preferred phone number.
4. If you or your parent has any questions please include them in the email.