

# OHHS CTE Robotics Department

## Course Syllabus



**Course Name:** Advanced Robotics

**Course Code:**

### **Course Description:**

This is a competency based course that runs between 1 trimester and a full year based on the student. Students will design, prototype, build, program and test a variety of engineering and robotic solutions to problems in their community as well as work on a myriad of special and team based projects. Through the class 4 competition robots will be built each year. Students will also have the opportunity to mentor younger members of our STEM community.

### **Prerequisites**

None (Algebra Recommended)

### **Course Resources**

The internet and other web resources

Various trade magazines and industry publications

FIRST Robotics

### **Course Fees**

None

### **Course Outline/Instructional Units**

1. Safety
2. Project Planning
3. Communication
4. Measurement
5. Design
6. Manufacturing

7. Electronics
8. Programming
9. Advanced Robotics Projects

## **Major Assessments**

### Exam Grades

1. 9 – Competencies
2. 2 Project Grades

### Professionalism

3. Gracious Professionalism (Employability Skills Assessment)

#### **Professionalism Grade is earned by:**

- Be Here
- Be On time – Arrive to class before the last bell stops ringing.
- Be Prepared– Project out, safety goggles on, clothing for work is safe - no open toed shoes...
- Be On Task - working during period, conversations are on topic
- Be Respectful – listen during instruction, use positive comments when speaking with peers, word questions and comments appropriately during discussions

## **Extra Help**

Students may attend tutoring after school on Tuesdays and Thursdays to get extra help during the 7th period class.

## **RE-DO POLICY:**

OHHS is an effort based school where we believe all students can learn. We also know that students learn at different rates. Thus, we are implementing a re-do policy that recognizes the needs of individual learners.

- Assessments are eligible for redo up to 100%
  - Students are eligible to redo assessments when key supporting assignments are complete. Key assignments provide evidence that students are ready to show mastery of a standard
- Students are eligible to redo key assignments as long as they have excused absences.
- There are assignments that may not be redone because they do not bear enough weight or the learning target for that assignment will be measured on another larger assignment.

### Weighted Categories

<b>Category</b>	<b>Percentage of Overall Grade</b>
Daily Work	20%
Exams and Competencies	70%
Professionalism	10%

### Grading Scale:

<b>Regular Scale</b>	
<b>Letter Grade</b>	<b>Percentage</b>
<b>A</b>	<b>93% and Above</b>
<b>A -</b>	<b>90%-92.99%</b>
<b>B+</b>	<b>87%-89.99%</b>
<b>B</b>	<b>83%-86.99%</b>
<b>B-</b>	<b>80-82.99%</b>
<b>C+</b>	<b>77%-79.99%</b>
<b>C</b>	<b>73-76.99%</b>
<b>C-</b>	<b>70-72.99%</b>
<b>D+</b>	<b>67%-69.99%</b>
<b>D</b>	<b>60%-66.99%</b>
<b>F</b>	<b>59.99% and Below</b>

**OHSD PLAGIARISM POLICY:**

Any student, who knowingly turns in any work that has been done by someone other than himself or herself, and fraudulently represents it as his/her own, shall be considered to have cheated. Cheating also includes: aiding someone else in cheating, the use or preparation of written, pictorial, electronic or other materials not authorized by the instructor during a test or assignment, the use of testing materials obtained previous to the test date, or plagiarism of any kind. Students found cheating will also be subject to an office referral, which could result in a suspension. As an effort based school, students who have plagiarized/cheated must still demonstrate their learning. Thus, students will be given the opportunity to complete the work. This will fall under the "Late Work Policy" of the teacher where total possible points may be reduced.