

# OHHS Career & Tech Department

## Course Syllabus

**Course Name:** Robotics and Automation

**Duration:** Semester

**Cross Credit:** This course qualifies for Career and Tech or Science

**Course Description:**

This is a hands on cooperative competition based course in which students complete a series of projects designed to teach them basic engineering and robotics skills. Students will design, build, program and test robots in a competitive environment.

**Prerequisites:** None

**Course Resources:** No textbook. Teacher supplied materials and Internet research.

**Course Fees:** None

**Course Outline/Instructional Units:**

- Basic Programming/ Introduction to robotics
- Line Following
- Robot Sumo
- Robot Soccer
- Special Projects

**Major Assessments:** Grading in this class will be based on a point system.

Assignments, labs and tests will be worth 8 points per assessment.

Challenges: 32 points

Lab Writeups: 32 points

Gracious Professionalism (work habits and cooperation): 32 points

Written Assignments: 80 points

Midterm and Final: 128 points

**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.

- 100% Re-do
  - Assessments (with exception of the Final semester exam)
  - Key Assignments: Evidence that demonstrates mastery of a standard
  - Teachers may:
    - require completion of supporting assignments prior to re-do opportunities for students to show they can meet the standard.
    - require students to complete re-do of work outside of class time.
    - limit the number of re-do opportunities for each assignment.
    - assign zero grades when students choose not to do key assignments and/or assessments to standard.
    - have different requirements for late work. All opportunities for re-do work will come with a deadline as assigned by the teacher.

**Extra Help:** If you are falling behind in class or having a hard time understanding the concepts being taught, you have some options to help you succeed.

1. Come in before or after school to get help from the teacher or work on your projects.
2. Do your plans at home and use class time to build and test projects.
3. Get help from fellow classmates.

**OHHS Tardy Policy:** Students are expected to be in their assigned seat and ready to work. If students are tardy they will lose 10 points a day from their work habits grade.

Tardy Procedure:

1st tardy student receives warning.

2nd tardy student assigned detention.

On the 7th tardy student will receive automatic referral to Deans

Failure to complete teacher assigned detention student's parents will be contacted and a referral for failure to show will be written.

**OHHS 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.

This does not include project based work that is “inspired” by the work of another. It is understood that in science and engineering we all build on the work of others. The key point here is to “build on to” not just copy. Students should be able to show how they have improved the work that inspired them.