Robotics I

Instructor: Mr. Vo   **Email**: lvo1@houstonisd.org   **Room**: 1106

Tutorials: Mon → Thursday 4:00 → 4:20   **Conference**: 5th period

Course Content
In Robotics I, students will transfer academic skills to component designs in a project-based environment through implementation of the design process. Students will build prototypes or use simulation software to test their designs. Additionally, students will explore career opportunities, employer expectations, and educational needs in the robotic and automation industry

Text
The textbooks for the course is Core Curriculum: Introductory Craft Skills Trainee Guide 5th Edition

About the Teacher
I began my teaching career as a math teacher in 2009 in Chicago, IL. In 2014, I relocated to Houston to teach mathematics at Waltrip High School. I'm currently an Engineering and Presentation I and Robotics teacher.

Ongoing Objectives
- Become a Certified SolidWorks Associate
- Earn Core NCCER Certification
- Developed Soft Skills for Employment

Portfolio
Students are required to maintain an organized portfolio for the course. It will be submitted as a grade during each project cycle. Portfolios are digital and are created on Weebly a sample portfolio is available at https://waltrip.weebly.com

Grading Scale
Participation   20%
Daily   40%
Major   40%

Attendance and Participation
Attendance and participation are required; it is difficult to learn the content if you are not present in class. You class participation and attendance can be a deciding factor if your class average straddles two grades. Be sure to see me about any missed work if you are absent. In the event of an unexpected absence (i.e.

illness, emergency, etc.), the student is responsible for ensuring that the absence is excused before assignments (available on the HUB) can be turned in and graded. Student will have three (3) days to turn in completed work. Students will be given at least one opportunity to submit late work following an absence. Grade penalties and the amount of time allowed to complete the assignment are as follows:

Late Work related to an absence:
3 days to turn in the assignment no points deducted full credit eligible

Late Work NOT related to an absence:

1 day late	-10 points	max 90
2 days late	-20 points	max 80
3 days late	-30 points	max 70
4 days late	-40 points	max 60
5 days or later	zero assigned to the grade book	

ASSESSMENT RETAKE POLICY

A student will be permitted to retake any major test. The retest <u>must</u> occur <u>within five (5) school days</u> of the date the grade was received. The higher of the two test grades will be recorded. This does not apply to final exams. CSWA retakes must wait at least 30 days per SolidWorks policy.

Daily Required Materials
1.laptop   2. Writing Utensils   3. Project materials   4. Homework (late work)

Course Overview

Unit One
What is a robot? and Lantern Project

Unit Two
Lantern Project

Unit Three
FTC and BEST robotics

Unit Four
Holiday Card Project

Unit Five
Arduino

Unit Six
Scratch

Unit Seven
Botball

Unit Four
MATE

Ongoing Project
This year students will be working on a major project on and off throughout the school year. This project is called Games Robots Play, they will be designing a robotics challenge, organizing the event and those who choose to volunteer will help run the event.

Special Projects
Some students will have the opportunity if they so choose to work on independent projects. For example working with our Nao robot or programable drones.