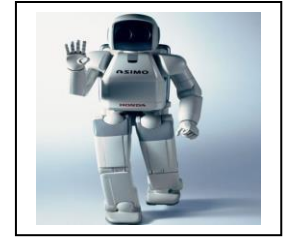


WJMS

Pre-Engineering / Robotics / TSA

Syllabus

Mr. Williams (Updated 8-2017)



drwillia@jeffco.k12.co.us
<http://dwteach.com>

303-982-3046 voice
Rooms 414 & 416

COURSE OBJECTIVES

- Students will know and understand:
 - o The steps of the Engineering Design Process and Processes
 - o Units and tools of measurement.
 - o Safety rules and their importance in a production environment.
 - o The impacts of technology on society.
 - o Technology Student Association (TSA) and TSA Style Criteria, Constraints, and Rubrics will be used in Problem Based Learning (PBL) curriculum
 - o Curriculum is based on 2016 CTE STEM Pre-Engineering C-CAP
- Students will be able to:
 - o Read and create technical drawings to communicate design ideas.
 - o Select and safely use tools to create solutions to problems.
 - o Apply the design process to solve problems in engineering and robotics.

GRADING POLICY (class follows the WJMS Grading Policy)

Work Habits	15 %
Learning Progress	30 %
Assessments	55 %

Grades are based on earned points divided by total points possible multiplied by 100%.

A (100 – 90) % B (89 – 80) % C (79 – 70) % D (69 – 60) % F (59 – 0) %

Work Habits: Every student is expected to come to class **on-time** and ready to learn with **all of the materials** they have been asked to bring. Upon entering the class everyday there will be a warm up that should take no more than 5 minutes. All handouts and graded papers will be kept neatly in a folder. **Notebooks, writing tools, and paper are to be brought to class every day**, these items will not be supplied by the teacher. Folders may be checked or collected for a grade at any time and must be kept neat, complete and organized. Students are expected to **follow all safety rules, participate** in all class activities including **working collaboratively** in group assignments. Work habits grades reflect the student's participation and/or the completeness of work on that particular day. **Grading follows the WJMS Grading Policy.**

Content Learning Progress: Activities, parts of projects and unit tests that ask students to demonstrate their skills and knowledge will be graded to reflect their progress towards mastery of the curriculum. Skills and knowledge must be demonstrated in order to be graded; therefore, missing or incomplete work will be recorded as a missing in the grade book. Once the student is able to demonstrate mastery they could earn full or partial credit in the grade book. **Grading follows the WJMS Grading Policy.**

Assessments: Each student's mastery of the required skills, knowledge and understanding will be assessed by grading tests and final products of projects. Students will need to study for safety tests and unit tests. Test retakes can be scheduled for after school if needed, **Incomplete PBL projects may not receive partial or full credit.** Because projects are done in class, often in groups, it is not easy for students to make-up or redo projects. Attendance and daily participation in class is very important. **Grading follows the WJMS Grading Policy.**