

Robotics Syllabus

CSRMS's Vision encompasses instructional excellence through school, student and parent efforts outlined in five student outcomes:

Learning Gains & Annual Yearly Progress (AYP) Promotion to next grade level

Promotion to High School Graduation from High School College, Career and Life Ready

Instructor: Mr. Aursland

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Room: 102

Telephone: (813) 346-1326 Program: CTE - Robotics

Course Description:

❖ Automation and Robotics (AR):(Foundation course - EX ROBOTICS TECH/CP)

Students trace the history, development, and influence of automation and robotics. They learn about mechanical systems, energy transfer, machine automation and computer control systems. Students use a robust robotics platform to design, build and program a solution to solve an existing problem.

The Purpose: Project Lead the Way (PLTW) – Gateway - <u>www.pltw.org</u> is intended for grades six through eight, designed to spark and interest in STEM (Science, Technology, Engineering and Mathematics) subjects and prepare students for further study in high school.

Automation and Robotics:

- Lesson 2.1 What is automation and robotics?
- Lesson 2.2 Mechanical Systems
- Lesson 2.3 Automated Systems

Grading Policy: Grade is a reflection of the progress of mastery towards standards.

- ❖ 50% Projects (Summative)
- ❖ 10% Engineering Notebook (Formative/Summative)
- 20% Tests (Summative)
- 20% Quizzes/Classroom Work (Formative/Summative)

Grading Scale:

90-100	Α	90-100% (Mastered)
80-89	В	80-89% (Proficient)
70-79	С	70-79% (Partial Knowledge)
60-69	D	60-69% (Lack of Mastery)
0-59	F	0-59% (Failing)

Class Work: Students are expected to complete class work assignments, then turn them into the bin. When returned, students will keep the assessed assignments in your notebook. The notebook can be used to study for quizzes and tests. **Homework/assignments are due at the beginning of class.**

Make-up Work: Students must request missed assignments and may make up missed work. Completion of all assignments are required. Missing work will result in an "M" Missing (counts as 0).

Notebook: Students are to keep an **engineering notebook that contains all class assignments**. Students can and will use this to help study and prepare for projects, classroom activities, and assessments. This is a valuable tool that will aid in organizational skills.

Attendance/Tardy Policy: Students are expected to follow the school-wide attendance policy. Students must be present in class to complete the class activities/labs, actively participate in guided instruction as well as discussion. Activities will include cooperative learning activities that require students to work and problem solve in groups. Individual work will also be assigned. They are to be seated when the bell rings.

Electronic Policy: Electronic devices may be used only with teacher permission for academics. Failure to follow teacher direction has three (3) consequences: 1st is a warning, 2nd is you will be asked to place it on the teacher's desk and will be returned at the end of class, and 3rd the student will be asked to hand it to the teacher (it will be locked up) and the device will be turned in to the front office to be claimed at the end of the day.

Plagiarism Policy: Plagiarism, the unacknowledged use of other writer's words or ideas, is a serious offense. Any work submitted which the student has not written or which is not properly and fully documented will receive a zero grade. This offense will also be referred to administration for further disciplinary review.).

Academic Dishonesty: Cheating will not be tolerated. First offence will result in a zero for the assignment. The second offence will result in a referral, and student must retake the assignment or assessment. **Academic Integrity defines you as a student. Students are expected to fully contribute to group activities. Individual assignments must be individual ideas.

End of course assessments: For any course with content that is not aligned with a statewide or other approved assessment, the student will be expected to take a District/Principal Approved Final that will account for 10% of the student's semester grade in which they take the assessment.

Student Expectations During the School Year:

- Record and maintain class notes on a daily basis in individual engineering notebooks.
- Complete daily work and homework, as assigned, on time.
- Participate in all classroom discussions and activities.
- Record homework, test dates, and due dates for any work in the student planner.
- Pass pre-announced quizzes and tests on material covered in lectures, discussions, and classroom activities
- Request make-up work from me upon return from an absence within two school days.
- Communicate to me any questions or concerns immediately.
- Follow all rules (including **safety rules**) while in the classroom.

CLASSROOM Policies/Procedure

Bathroom Passes

Students will use the bathroom sign-out sheet when going to the restroom during class. One person at a time may utilize the restroom.

Language

Students will conduct themselves as responsible and respectful citizens in class, as they would in public. Profanity, sexual overtones, and racial or prejudice comments are not acceptable, and not be used in class or on school campus.

School Property

Please respect personal property and the property of the school. Do not write on desks, tables, books or walls. Also, please put all supplies back after usage, and clean-up work area. They are there for your use and convenience, and will continue to be provided if you maintain them properly.

Citizenship

Respect others' opinions, and be courteous when someone is expressing their answers, ideas or interpretations. At times, students will work in cooperative groups, and will be expected to work respectfully and productively with their classmates. Only one person at a time should be speaking, and please raise your hand if you have a question or comment. This also includes personal space and seat assignments. The classroom is a community, and it is vital that every student conduct himself or herself as a productive community member contributing in a positive manner.

Classroom Routines

Upon entering class, students will complete a daily warm-up problem and/or vocabulary related to the course. Students will also be expected to work bell to bell, and complete summaries as requested. Grooming will be done outside of the classroom. Book bags/purses are to be off tables and/or desks, as well as keeping walkways clear. A designated area may be assigned for students to store their backpacks.

Safety Procedures

Absolutely NO FOOD OR DRINK other than water if needed! Sinks are only to be used for project lab purposes unless special permission is given. Each student must sign the rules and have a parent (or legal guardian) sign the rules sheet as well. If a student has not returned the signed sheet, he/she will not be allowed to participate in the project labs. If safety rules are not followed, a student will be given an alternative assignment.

Raven Values

- Be Respectful
- Be Responsible
- Be a Problem Solver

Pasco County Student Code of Conduct: http://www.pasco.k12.fl.us/ssps/conduct/

Consequences for not following expectations are as follows:

Step 1 may include one or more of the following: seat change, **Verbal Warning**, private redirection, student conference, student time out, sent to another teacher, written consequence, parent contact

Step 2 may include one or more of the following: team review of expectations, reteaching appropriate behavior, self-reflection (written), parent contact, **lunch detention**.

Step 3 may include one or more of the following: parent contact, after school detention, lonely lunch, no passing, loss of privilege, administration/guidance conference, behavior contract, **After School Detention**.

Step 4 may include one or more of the following: parent contact, Discipline Referral.

I look forward to working with each and every one of you this year in order to prepare you for your future endeavors as a productive member of society. We will spend a little time each day preparing you to become critical thinkers, which is a skill that transcends all occupations.

Sincerely,

Mr. Aursland
Partners in Education