



Robotics and Engineering 2025-2026 Syllabus

Teacher: Mr. Luis Garcia

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Plan Period: 6th Hour

Monday - Friday: 1:54 PM - 2:42 PM

Early Release Monday: 12:28 PM - 1:02 PM

Phone: 405-947-6272

Textbook: N/A

Course Description:

This course introduces students to the fundamentals of robotics, engineering design, and programming through project-based learning. Students will apply problem-solving, critical thinking, and teamwork to design, build, and program robotic systems and other engineering projects. Emphasis will be placed on real-world applications, creativity, and innovation in engineering.

Course Objectives:

1. Apply the engineering design process to solve problems.
2. Use mechanical systems (gears, levers, motors, sensors) in robot design.
3. Develop and apply programming skills for robotic control.
4. Work collaboratively in teams to design, build, and test prototypes.
5. Explore career pathways in robotics, engineering, and technology

Required Materials:

- Composition Notebooks – one per class; additional notebooks may be needed later in the year.
- #2 pencils and pens - replenished during the year
- One handheld pencil sharpener with a shaving catcher
- Loose-leaf, lined paper. 500 Count to start. Students must replenish as needed.
- 2” binder where paper may be added

Attendance Policy and Classroom Expectations:

- Show up, be on time, and participate.
- Follow ALL school requirements with respect to social distancing, safety procedures, and disinfection protocols.
- 10% excused and unexcused absences will result in a No Credit (NC) for this class.
- Three tardies will equal one absence.
- All scholars are expected to be respectful to all individuals in the classroom at all times.
- There is to be absolutely no gum, food or drinks in the classroom.
- Scholars are to come to class prepared with all materials.
- Any scholar absent from class has the same number of days as they are absent plus 1 day to turn in missed assignments. It is the scholar's responsibility to find out missed assignments (check the website or ask the teacher as soon as possible). Failure to turn in missed work will result in a zero. Any assignment or project that was due on the day of absence must be turned in the next school day in attendance.
- Scholars have one week to meet with their teachers to set a date to make up a test. Scholars have until the quarter ends to take a test missed due to absence. Any test not made up will receive a grade of zero.
- All assignments must be completed by the date/time they are due.

- Academic Dishonesty: Plagiarism and cheating will not be allowed in this classroom! Zeros will be given for plagiarism and cheating, parents will be called, and further disciplinary actions may be taken. Plagiarism and cheating includes copying another scholar's work.

Academic Meaning of a Grade:

The reporting of grades to parents and students will be given in two parts. A traditional "A-F" grade will be given to reflect the percentage assigned to the academic work attempted by the scholar. It DOES NOT reflect the mastery of the content by the scholar. In addition, scholars will be given a Mastery Based Learning grade. The last grade of the year will express how well the scholar has mastered the state required content.

For example, a scholar may be given an "A" for the traditional grade but a "2" on the Mastery Based Grading system and would be reported as "A/2." Ideally, these grades will match up as "A/4."

- Grades should accurately reflect individual scholar achievement in relation to course evidence outcomes related to Oklahoma Academic Standards / National Standards for the subject taught.
- A "3" on a task/assessment is considered proficient or meeting grade-level standards while a "4" is considered advanced or meeting grade-level standards with a high level of excellence.
- Extra credit is not applicable but extension or alternative assignments/assessments may be offered to show proficiency or advanced proficiency.
- Scholars are given timely feedback and reteach/relearn/reassessment opportunities are provided to promote proficiency of the standards.

Weighted Categories:

Formative: 25%
Summative: 45%
Classwork: 20%
Participation: 10%

Grading Scale:

A 90-100%
B 80-89%
C 70-79%
D 60-69%
F Less than 60%

Formative Versus Summative Scores: "Teachers record and track *formative scores* from individual assessments as indicators of students' knowledge or skill at particular moments in time. In comparison, *summative scores* are final scores based on the pattern of students' responses over time. Teachers may base each score on a number of common assessment forms, such as obtrusive, unobtrusive, and student-generated assessments. However, formative scores are used for tracking progress, while summative scores express students' mastery of a topic, generally at the end of a unit." -Robert Marzano

Enrichment/Remediation: When students struggle on an assessment with one or more standards, they may be assigned enrichment during the school day and may be required to after school enrichment as well. When students have completed enrichment, they are given a reassessment to show their level of understanding of the standard. The grade on the reassessment will replace the original grade.

Scholar Progress:

- Progress reports for scholars are prepared three times each year, midway through each 9-week grading period *except for the first quarter*. Parents **MUST** come onsite to pick up and sign for the progress report on the day they are issued. Parents/guardians of scholars making a “D” or “F” grade must meet with teachers then. If a parent/guardian does not attend this important meeting, their scholar will not be allowed back in class until the progress report is picked up and the meeting is attended. The conference will be scheduled according to the teacher's work schedule.
- School dismisses at 3:35 pm. Students not making adequate progress may be required to attend Saturday school and be assigned to Personalized Learning instead of an elective.