



Fab Lab 2025 - 2026 Syllabus

Teacher: Mr. Bradley Parsons

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Plan Period: Monday-Friday; 6th Hour (1:54 - 2:42pm)

Phone: 405-947-6272

Textbook: *N/A*

Course Description

Fab Lab is a creative engineering design class. This course aims to teach scholars to be more creative and prepare them for a college program in engineering. Throughout this course, we will learn to imagine, design, and create projects using software and 3-D printing capabilities while utilizing the Engineering Design Process as our catalyst for inventing and completing various design projects.

Course Objectives:

- Design Software Mastery: Proficiency in industry-standard design software for creating detailed digital models.
- Engineering Design Process Application: Use the Engineering Design Process for systematic problem-solving and innovation.
- 3-D Printing Expertise: Hands-on skills in operating 3-D printers for rapid prototyping and fabrication.
- Collaborative Project Development: Foster teamwork through group projects, emphasizing effective communication and collective problem-solving.

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.

Attendance Policy and Classroom Expectations:

- Show up, be on time and participate.
- Scholars must attend 90% of each 9-weeks to receive a grade for the class.
- Failure to check in online will result in an automatic absence for that day.
- 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 including notebook paper, pens, and assignments.
- 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 Google Classroom 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 day 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.

Grading Scale:

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

Grade Weights:

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

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 attend Saturday morning 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 of each 9-weeks 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 who are making a grade of “0” or “1” must meet with teachers at that time. 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 attended. The meeting will be scheduled during the work schedule of the teacher.