



A. Crawford Mosley High School

Mr. Breeden's Principles of Engineering Class

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What you'll need for this class

1. Mechanical pencils & erasers
2. A folder for papers & class handouts
3. One item from the classroom supply list
4. Engineering Notebook (provided by teacher)

Prerequisites

- Passing grade in IED
- Recommend having completed geometry

Course Description

Principles of Engineering (POE) is a foundation course of the high school engineering pathway. This survey course exposes students to some of the major concepts that they will encounter in a postsecondary engineering course of study. Students explore a broad range of engineering topics, including mechanisms, the strength of materials and structures, automation, and kinematics. It is weighted at 4.5, which makes it honors level. All students will strive to earn an industry certification in the Autodesk Inventor computer aided design (CAD) program if they haven't already done so. For most of the course, it will be difficult to complete work at home, so students are expected to work diligently during class in order to keep up. In order to earn college credit, students must maintain an 85 B average and score a 6 or above on the EOC exam (a 5 is the national average; a 9 is perfect).

Communication

The daily agendas will be posted on the website weekly. If you're absent, refer to the class website. Course documents, assignments, and lessons are accessed on the Project Lead The Way website (PLTW). All projects due dates will be posted in Focus as they are assigned.

Expectations

- Come to class ready to work, be respectful, and use your time wisely.
- Adhere to all CTE Career Readiness standards.
- Laboratory Expectations: Safety contracts, signed by student and parent, must be returned before student can participate in class activities. Because this is a hands-on class, students will be using tools and appropriate safety equipment. If a student does not adhere to safe work practices or engages in horseplay, the student may be dropped from the course.
- A student is financially responsible for any materials that he/she has broken or damaged by inappropriate use.
- No food, gum, or drinks will be allowed in this classroom!
- Cell phones should not be used. If a student's cell phone is preventing them or their peers from working, it will be collected until the end of class. Repeated violations will result in further action.
- All students and parents must sign the testing consent form in order to take this class.

Discipline

Tardiness, dress code violations, behavior notices, and other violations to the school policies will be enforced in this classroom. It's a privilege to be in engineering classes, reserved for responsible students interested in exploring engineering processes.

1. Are you prepared for class? If so, you have your materials ready; assignments from yesterday completed and are ready for today's lesson, assignment, or test.
2. Tardies: (unexcused)
 - a. 1st-2nd- verbal warning. After two tardies, points will be deducted from your career readiness points.
3. Classroom Disturbances:
 - a. Nobody has the right to interfere with another student's right to learn and a teacher's right to teach.
 - b. Verbal warnings, parent contact, DR, or points deduction depending on the issue
4. Cheating- zero tolerance
 - a. If a student cheats, they will receive a discipline referral and must reassess that material.
 - b. If a student allows another student to cheat using their work, that student will receive a zero or detention. Students that receive a zero will be given a replacement assignment. If it's a serious infraction, a DR could be given.

Grading

All grades will count as summative grades. Be sure you and your parents have access to Focus.

- 10% Career Readiness (CTE Standards; will show up each week as "CR: Aug. 20-24" in Focus)
- 90% Design Projects, Tests, Quizzes, and Exams
- 0% Formative work (will receive a check when completed)
- If no grade is listed in focus, then I haven't graded that assignment or test yet.
- If a "missing" is shown, the assignment wasn't turned in. This is calculated as a zero.
- Final Exam: EOC grade (9= 100A, 8= 95A, 7= 90A, 6= 85B, 5= 80B, 4= 75C, 3= 70C, 2= 65 D, 1= 60D)

Late Work

If you miss class, it's very important you check the class website to review the assignments and stay caught up. Meeting deadlines is an important part of the engineering process and will be strictly enforced. All projects and tests are built around a due date and what students can accomplish in that time period. All projects would be perfect if time wasn't a factor; however, we are very limited on time. It's the student's responsibility to ask for work if they're absent. I won't track you down to give you missing assignments (Sorry, there are too many absences for me to keep track of). Refer to the class website in order to get caught up.

- Late work will not be accepted after one calendar week. (Even if we're out of school; email it!)
- A penalty will apply for all work turned in late.
- If a student is absent the day before a scheduled test, exam, or project due date, they will still take the test, exam, or turn in their project on time. (This applies excused or not)
- If a student is absent the day of a test or exam, the student will take the test or exam the day they return. If a project is due and you're absent, a penalty will apply for late submission (excused or not).
- If you're out for an extended period of time, such as an illness, personal reasons, or family trip, you should refer to the class website in order to stay caught up. However, the nature of this course will make it very difficult to work from home, so plan to come before school to get caught up.
- Reassessment: Refer to the CTE department policy.
- After one calendar week, grades for projects and assignments will not be modified or changed. Additionally, no grade changes will take place five days before the end of the nine weeks.

Engineering Notebook

Each student will be issued an engineering notebook. Students will receive instructions in class for how the engineering notebook is to be set up and used. Students must bring their engineering notebook to class every day. The notebook will be graded as projects are completed. Students will receive instructions for completing assignments in the notebook.

If at any time, you have any questions, don't hesitate to contact me. Email is fastest. Please sign and return the syllabus receipt noting that you read and understand this syllabus. An electronic copy is available on the class website. This document is yours to keep.

Principles of Engineering Syllabus and Grading Policy Receipt (2018-19)

As a student/parent, I have read all the information on the Principles of Engineering syllabus. I will adhere to the rules of A. Crawford Mosley High School and the policies of the CTE department and Mr. Breeden's classroom.

(Student): I know that I can and should ask for extra help when needed.

(Parent): If at any time I have any concerns about my child's performance in Introduction to Engineering Design, I know that I can contact Mr. Breeden by e-mail at breedb@bay.k12.fl.us or by phone at (850) 767-4400.

Student Name: _____ Signature: _____ Date: _____

Parent's Name: _____ Signature: _____ Date: _____

Parent's email: _____

Parent's Daytime Phone Number: _____

This form must be signed and returned by August 24, 2018