

# Principles of Applied Engineering Syllabus 2018-2019

Instructor	<a href="#">Dellen Gibson</a>	Room Number	<a href="#">D102</a>
Phone	<a href="tel:469-302-4964">469-302-4964</a>	Conference Time	<a href="#">11:35-12:27</a>
E-mail	<a href="mailto:dgibson@mckinneyisd.net">dgibson@mckinneyisd.net</a>	Lab Tutoring	<a href="#">As arranged after school on Monday</a>

**COURSE DESCRIPTION:** 8th Grade Course for High School Credit

**Principles of Applied Engineering** provides an overview of the various career fields of science, technology, engineering, and math (STEM) and their interrelationships. Students will use multiple software applications to prepare and present course assignments along with hands on projects. Through hands on activities, students will develop applicable knowledge and skills in design and construction, critical thinking and problem solving, and communication and collaboration. This course is a prerequisite for Introduction to Engineering Design and a foundation course for Robotics I. The grade earned will count for high school credit but will not be applied to high school GPA or class rank.

**LAB FEE:**

[The \\$30.00 lab fee will be used for various hands-on activities.](#)

**HIGH SCHOOL CREDIT:**

Principles of Applied Engineering course is offered as a high school credit course. Students will be awarded 1 credit upon successful completion. In order to receive the high school credit, students must earn a grade of 70 or above in each semester and comply to the 90% attendance rule.

**GRADES:**

<b>Formative 30%</b>	Formative grades are given to assess student learning throughout the grading period. This category will include daily work, quizzes, employability skills, and individual assignments. <a href="#">Grades scoring under 70% will not be able to be corrected for a higher grade.</a>
<b>Summative 70%</b>	Summative grades are cumulative and designed to assess mastery throughout the grading period. This will include exams and projects. <a href="#">Summative assignments may be turned in late for 10 points off each day. Grades under 70% may be corrected for a score up to 80% if completed within three days after posting in HAC. Midterm and Final tests may only be taken one time. There are no opportunities to take the tests again for a higher grade.</a>

**ATTENDANCE/TARDIES:**

For the success of the student, daily attendance is imperative. Students are also expected to be in their seats and logged in to their computer BEFORE the tardy bell rings. Consequences for being tardy are outlined in the student handbook.

**LATE WORK:**

All work is expected to be turned in on time. Late work is discouraged; however, a student may turn in his/her work after the due date for a reduced grade unless excused. Mandatory after school detentions may be assigned if the work is not completed and turned in on time.

**ABSENCES:**

Students are allotted ONE school day for every day of excused absence. It is the student's responsibility to complete and turn in all the necessary work within the time frame allotted for the absence. Students may need to attend tutorials if they need extra help to catch up. If a quiz or test is missed, it is also the student's responsibility to schedule a time during tutorials to make up the quiz or test. Students will need to attend tutorials promptly in order to keep pace with projects.

**TUTORING:**

Upon coming to lab tutorials, students must be prepared with questions over something he/she is not understanding or the name of the assignment that needs to be made up.

**SAFETY:**

The student will be able to compare and contrast what is safe versus unsafe, demonstrate safe and appropriate use of various tools, equipment, passing random tests about safety with 100% accuracy. Students will not participate in projects if they do not demonstrate safe tool and materials practices. **§130.362.(c)(3). Equipment and tools may not be used from the classroom without written consent and parent approval. This form must be returned before students will be permitted to access equipment.**

**DISCIPLINE/CONSEQUENCES:**

If a student disregards the expectation for classroom lab behavior and the learning environment is disrupted, a verbal warning will be issued. Continued disruptions will result in a conference between student and teacher, parent contact, detention, and an office referral. Computer games are not allowed and may result in the temporary use of computers and using state issue books.

**ACCEPTABLE USE POLICY (AUP):**

The Texas Essential Knowledge and Skills for this course focus extensively on the use of computers and the Internet in the classroom. Students will be required to use various forms of information exchange including email, electronic bulletin boards, and instant messaging. For that reason, students and parents will be required to read, agree to, sign, and return the MISD Student Technology Acceptable Use Policy. Students are not to access games, videos, or surfing for personal interests unless permission is given by the teachers for instructional purposes. **This form must be returned before students will be permitted to log-on to the computers.**

**INDEPENDENT PROJECTS:**

Students are encouraged to develop 21<sup>st</sup> Century Skills by developing a project that inspires them. The first semester students will be learning computer programming using various online applications. During the 2nd semester students may continue to develop their computer programming skills or choose a project approved by the teacher. Students will work on projects on Mondays and when other classwork is completed.

**FLIPPED CLASSROOM WORK:**

Most all work can be completed in class unless a student is absent or does not use class time wisely. Lab Tutoring is available on most Mondays as arranged. Students will have plenty of notice to study for tests, the midterm exam, and the final exam.