

# 2013-2014 Syllabus

## Concepts of Engineering

<b>Instructor</b>	Vicki Mason	<b>Room Number</b>	E 104
<b>Phone</b>	469-302-6755	<b>Conference Time</b>	10:38 – 11:30
<b>E-mail</b>	vmason@mckinneyisd.net	<b>Tutoring Hours</b>	Tuesday mornings
<b>Class Website</b>	<a href="http://www.dowellmiddleschool.net/career--technology.html">http://www.dowellmiddleschool.net/career--technology.html</a>		
<b>Twitter</b>	<a href="#">@vickifmason</a>		

### COURSE DESCRIPTION:

**Concepts of Engineering** provides an overview of the various fields of science, technology, engineering, and mathematics and their interrelationships. Students will use a variety of computer hardware and software applications to complete assignments and projects. Upon completing this course, students will have an understanding of the various fields and will be able to make informed decisions regarding a coherent sequence of subsequent courses. Further, students will have worked on a design team to develop a product or system. Students will use multiple software applications to prepare and present course assignments.

### FEE REQUIRED:

This course has a **\$30.00 fee**. The fee is for consumables that include supplies for CO<sub>2</sub> Dragsters, bridge building (balsa wood strips), mousetrap cars, solid fuel rockets, and other miscellaneous supplies, e.g., wood glue, hot glue, etc. **Lab fee is due by Monday, 16 September 2013 – checks payable to Dowell Middle School.**

### HIGH SCHOOL CREDIT:

Concepts of Engineering course is offered as a high school credit course. Students will be awarded .5 credit per semester upon successful completion. In order to receive the high school credit, students must earn a grade of 70 or above in each semester course 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, and individual assignments. (approximately 10 grades per 9 weeks)
<b>Summative 70%</b>	Summative grades are cumulative and designed to assess mastery throughout the grading period. This will include exams and projects. (at least 3 grades per 9 weeks)

### ATTENDANCE/TARDY'S:

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. Homework detentions will be assigned if the work is not completed and turned in on time.

### ABSENCES:

Upon a student's return from an absence, the student will need to make arrangements for alternative due dates if applicable. It is the student's responsibility to complete and turn in all the necessary work in a timely fashion and attend tutorials if needed. If a quiz or test is missed, it is also the student's responsibility to schedule a time during tutorials to make up that grade. All assignment information will be posted on the class's Edmodo site.

# Concepts of Engineering

---

## **TUTORING:**

Tuesday morning 8:00-8:45 is reserved for tutorials. Students may attend whenever they feel it is necessary; however, this time is set aside to assist those students who need additional help on something specific or need to make up tests and quizzes. Upon coming to 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.

## **COMPUTER LAB TIME:**

The computer lab is open every afternoon but Wednesday at 3:45-4:15 for students to complete work, if needed.

## **SAFETY:**

The student will be able to compare and contrast what is safe versus unsafe, demonstrate safe and appropriate use of various tools, equipment, and materials and pass a 50 question test about safety with 100% accuracy. Students will not participate in projects if they do not pass the Safety Test or do not demonstrate safe tool and materials practices. §130.362.(c)(3).

## **DISCIPLINE/CONSEQUENCES:**

If a student disregards the expectation for classroom 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. Students will be evaluated weekly on their Employability Skills §130.362.(c)(5).

## **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.

Every student has access to a computer in the CTE classroom, which is a blessing and a curse. It is a difficult task to keep students from playing games, watching videos, surfing their personal interests, etc. Simply, some students do not complete their assignments in a timely matter because they choose to “play” instead of work. It is a distraction and impedes learning for all.

Severe consequences are in place for students who choose to violate the Acceptable Use Policy. If your student has a phone, I will ask them to text or call you to let you know they have violated the MISD AUP and I will follow-up with an email.

The consequences are:

- Strike 1 – the parent/guardian is contacted by the student and verified by the teacher. (email)
- Strike 2 – afternoon detention on the next calendar Tuesday from 3:45 – 4:15.
- Strike 3 – classroom computer privileges restricted for five days and mandatory parent conference. The student will have to complete assignments without the benefit of technology.
- Strike 4 – Principal referral.

Your intervention to solve this prevailing problem so our students can concentrate on learning is appreciated.

## **20% PROJECT:**

Students are encouraged to develop 21<sup>st</sup> Century Skills by developing a project that inspires them. Students may work on their approved project when classroom assignments are complete; as well as, outside the course scheduled time and at home. <http://www.dowellmiddleschool.net/20-project.html>