

Engineering 2
2015-2016
Mr. Ed McKinley
edwardamck@leeschools.net

COURSE SYLLABUS

Course Title: Engineering Technology 2

Curriculum Area: Industrial Technology Education

Course Length: Year

District Adopted Texts/Materials/Resources:

Amatrol

Course Description and Purpose: Engineering is the application of math, physics and other sciences. In Engineering 2. Students will learn about concepts common to all engineers and perform case studies as individuals and teams. Some examples of these may include career investigation, ethics studies, alternative energy projects, and design projects.

Homework will be limited: Students may be requested to research various topics in engineering and technology to enhance the laboratory learning experience and be prepared to share the information they learned with the class.

Course Outline & Instructional Strategies:

- Pneumatics
- Hydraulics
- Precision Measurement
- Applied Electrical Controls
- Applied Mechanisms
- Structural Systems
- AC/DC Electrical Power Systems
- Surveying
- Thermal Dynamics
- Laser Engraving
- CNC Machining
- Robotics

Grading Procedures:

The Engineering department uses a traditional grading scale to measure student performance with the exception that the lowest grade possible is a 50%, which is still a failing grade for that assignment but keeps the increments between the grade cut-off points equal and fair.

Grading Scale:

- | | |
|---------------|---|
| ▪ 90-100% | A |
| ▪ 80-89% | B |
| ▪ 70-79% | C |
| ▪ 60-69% | D |
| ▪ 59% or less | F |

Absence/Make up work:

Learning is enhanced when students can cooperate, rather than compete, with each other. If every student does excellent work, everyone may earn an excellent grade in this class. This is an academically challenging program and students should have completed Algebra I and Geometry to be mathematically prepared for the exercises. Engineering Technology is also a "hand's on" class, so it is difficult for students to make up work that is missed during class time. Students will be expected to complete an alternate assignment of equal educational value to replace the missed evaluation. All quizzes and test will receive a zero until they are made up. Please note: In the work place, missing deadlines will result in lost contracts or in the termination of a job. Therefore it is important that students understand the importance of deadlines. All late course work must be submitted the week prior to the end of the current semester.