

**PLTW – Introduction to Engineering and Design**

**2017-2018 Course Syllabus**

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**Course Description**

Students will dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. You will work both individually and in teams to design solutions to a variety of problems using 3D modeling software, and use an engineering notebook to document their work.

**Course Materials** **Class Expectations**

A. Pencil 1. Be on time.

B. 3-Ring Binder 2. Be prepared.

C. Pocket Folder 3. Be respectful.

D. Graph Paper *(Spiral Graph Paper Notebook)* 4. Be responsible.

E. Ruler *(1 foot)* 5. Be safe.

F. Positive Attitude 6. No cellphones or food unless approved!

**Curriculum**

Unit 1: The Design Process Unit 6: Reverse Engineering

Unit 2: Technical Sketching & Drawing Unit 7: Documentation

Unit 3: Measuring & Statistics Unit 8: Advanced Computer Models - CAD

Unit 4: Modeling Skills Unit 9: Design Team

Unit 5: Geometry & Design Unit 10: Design Challenges

**Grading Weights**

**Formal** *(Tests/Projects)* 50%

**Informal** (*Daily Assignments/Participation*) 30%

**Final Exam** 20%

**Grading Scale**

A 100 – 90

B 89 – 80

C 79 – 70

D 69 – 60

F 59 – 0

August 28, 2017

Dear parents and students,

Welcome to the Academy of Engineering at East Mecklenburg! This is going to be an exciting semester. Parents feel free to review my website and students please get familiar with my Canvas page. Most assignments will be completed and submitted through Canvas. Students will be graded on Canvas however Power School will show correct grade averages. I am confident this will be an outstanding semester and I look forward to working with you all. All students can be successful in engineering with patience, practice, and persistence. I look forward to working with you in class. Go Eagles!

Best Regards,

Isiah Williams