INTRODUCTION TO ENGINEERING DESIGN:

COURSE OUTLINE & EXPECTATIONS:

GENERAL EXPECTATIONS:

That you will be on time, bring needed materials, and follow directions closely

That we will use our time together wisely, carefully, and productively

That you will do the best you can on all assignments and tests

That you will treat others the way you want to be treated-always

That we will never accept disrespect from you toward me or any other student-ever

COURSE OUTLINE:

1. History of the Engineering Design Process
2. Understanding and producing sketches of product parts
3. Producing Isometric Drawings and Working Drawings of products
4. Understanding and Producing Exploded and Assembly Drawings of Designs
5. Applying proper Dimensions to a product design
6. Produce a parts list to go with engineering drawings
7. Produce a final design project, including a decision making matrix, sketches, working drawings, isometrics, exploded assembly drawings, and parts list
8. Understanding the design process and how it is used in industry today

REQUIREMENTS:

Students will be producing a wide variety of design ideas using both free hand sketching techniques and the Auto-CAD Inventor software program. Students must develop an understanding of the design process from conceptualization to finished product ready for shipping to consumers. Design engineering skills and terms will be introduced and used as we complete various projects. Students will leave with a greater appreciation of engineering as a career choice.