## Technical Drawing Minor [PROPORTION AND SCALE ACTIVITY]

**Challenge:** In this activity, you are challenged to draw to scale any object of your choosing. The object that you select could be drawn in a side view, front view, top view, or possibly all three depending on the complexity of the object. The object that is chosen should exist or be based on something that exists so that the basic dimmensions can be used to create the foundation for an accurately scaled drawing.

## What you will need to do...

- You will need to go online and determine what object you would like to draw.
  - a. Mr. Hollstein will need to approve whatever design you would like to select.
  - b. If there is an object that you would like to draw that you posess at home, you may bring it in to obtain accurate measurements (Within Reason).



- 2. Once you have decided upon an object that you would like to draw, you must research as much information about the following characteristics:
  - a. Basic object dimmensions
  - b. Various views of the object to reference
  - c. Other important pieces of information to complete details about object.
- 3. Once all the information has been gathered, you must write a basic proposal describing the object you would like to draw including...
  - a. Details you will be including in your design (textures, grips, vents, mirrors, etc...)
  - b. What views will be included in your drawing (Top, Front, Side, all...)
  - c. Hand Drawn Sketches of your final drawing to provide Mr. Hollstein with an idea of what you would like to do.
- 4. Once Mr. Hollstein has approved your proposal, you may start drawing your object in AutoCAD. Remember, you may have to change the scale AutoCAD is using to draw your object as accurately as possible.
- 5. Once you are done with your AutoCAD sketch, you should attempt to create a colored rending of what it would look like when manufactured using the hatch tool in AutoCAD. You will need to use layers and save often to be successful.
- 6. At the very end you will be printing your final designs out using the plotter in the classroom. These will be displayed in to show the students design work and final product.