

## Memo

То:	METC 107 Students
From:	James Reitz - Instructor
Date:	Fall 2018
Re:	Mechanical Engineering Project

The purpose of this memo is to communicate the details of Mechanical Engineering Project. This project will require you to research and design a sustainable or green technology using AutoCAD. Although there are many types of green technologies, we will be illustrating a technology that is a modification to an existing residence. The project should include a drawing of the structure itself both with and without the new technology attached. You should use all of the drawing and annotating skills/techniques we have learned up to this point.

Possible projects:

- Solar Water Heater
  Solar Space Heating System
  Wind Turbines
- Water Collection System
   • Trombe Wall

## Presentation

You must give a 5-10-minute PowerPoint presentation discussing the following:

- · How the technology works
- How much the technology costs
- · Disadvantages of the technology
- How you created the drawings (must be shown in the PowerPoint)

## Assignment

You must submit the following:

- AutoCAD drawings of the structure without the technology
- AutoCAD drawings of the structure with the sustainable technology
- Dimensioned AutoCAD drawings of the technology including a 3rd angle orthographic projection (standalone not on the structure)
- A schematic design of the technology (how it connects to existing water supply, electrical grid, etc.)
- A 5-10-minute presentation and submit a printout of the PowerPoint slides (multiple slides per page)

The presentation will be given during class on **October 8th**. The outline of the presentation and all drawings will

be due at the beginning of class on this day in hard copy.

## Mechanical Engineering Project

Mechanical Engineering Project	Student:						
		Poor		Excelle			ent
Section Points		1	2	3	4	5	Section Scores
100 Drawings (Graded on proper drawing and annotation techniques)							0.00
20 Structure w/o technology							0.00
20 Structure w/ technology							0.00
20 Drawings of technology							0.00
20 3rd angle orthrographic drawing of technology							0.00
20 Schematic design of technology							0.00
100 Presentation							0.00
5 Format of tables and figures is clean and professional							0.00
5 Presentation is clear and to the point							0.00
5 Grammar and spelling are correct							0.00
20 Drawings are included in powerpoint							0.00
15 Meets time minimum (5 mins)							0.00
15 Explained how technology works, cost, disadvantages							0.00
20 Talked about design process							0.00
15 Well formatted and rehearsed							0.00
200	Points Earned			0.00			
	Total Possible Points			200			
		Percentage			0%		