

Memo

To: 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.

