

ENGR 1322 SWJTU
Lecture Assignment 1
Due Date: Thursday Oct. 1, 2020 before 8:00am

- Take something apart
 - Pick some mechanical device of interest to you – does not have to be extremely complicated.
 - Please be SAFE! Unplug electronic devices, etc.
 - See if you can understand how it works.
 - What are the main parts? What function do you think they serve? (Be sure to cite your sources if you look something up.)
 - Take a few pictures during the process.
 - Draw a simple sketch of the item and label the main parts. (Just sketch by hand – no need to use CAD for this.)
 - Put it back together again.
 - Does it still work?
 - How would you improve the design?

- Please submit the following to the **Lecture Assignment #1** dropbox on Canvas:
 - A single document (Word or PDF) containing the following three things:
 - 1) A brief write-up (1-2 pages of double-spaced text)
 - What did you take apart?
 - What are the main parts?
 - What function do you think these parts serve? (Be sure to cite your sources if you look something up.)
 - Did it still work when you put it back together? What problems did you face?
 - How would you improve the design?
 - 2) A simple sketch with the main parts labeled
 - 3) 3-5 pictures that you took during the process

Helpful Hints:

- This assignment should not take more than 2-3 hours. Don't make it too complicated! Remember to communicate effectively – present your thoughts clearly and logically, use spell check, etc.
- You have considerable freedom in choosing what item to take apart. It is okay if the item is fairly simple, as long as there is some disassembly involved.
- The item does not have to be *completely* disassembled. Opening a housing to expose the main components and taking out one or two is okay.
- It is okay to choose something that is broken (non-functioning) to begin with. I understand you may not want to risk breaking something new.