# Tips for CAD Assignments

## General:

* **READ WHAT IS DUE**
	+ Do you have everything, is it complete?
* **LESSONS LEARNED**
	+ Better be more than one sentence!
* **ASSUMPTIONS**
	+ If you did something that is not explicitly stated, it was assumed.
	+ Make sure to list all assumptions in either the journal or pre-cad.
* **LOGICAL ORDER of WORK**
	+ Organized, can a stranger understand what you did and how you did it?

## Technical Writing:

* **Organization, Neatness, and Readability**
	+ Consistent and easily readable format.
	+ Follows order of headings (can graders easily find each checklist item?).
	+ Concise and informative captions and text throughout (avoids narration, first-person, subjective, and repetitive or superfluous text).
	+ Appropriate size and placement of screenshots and subjects within each screenshot.
* **Lessons Learned**
	+ Clear identification of challenge/struggle area.
	+ Clear articulation of the learned solution/approach/technique.
	+ Concise and informative text (avoids narration, justification, subjective, and repetitive or superfluous text).

## Part Modeling:

* **FULLY DEFINED SKETCHES**
	+ Don’t even think about turning in anything under-defined!! Look for: (-)
* **ANNOTATE SKETCHES**
	+ Lets everyone know what each sketch is for.

## Drawing Packages:

* **BASELINE DIMENSIONING**
	+ Go over it! Is it clear? Non-redundant? Would our Machine Shop Manager approve?
* **CLARITY**
	+ Do not cross dimension lines, Lay out view to be nice and easy to read.
* **DIMENSION CONSISTANCY**
	+ Use Decimals, pay attention to sig. figs.
* **HOLE CALLOUTS**
	+ Does the Machinist know the depth, threads, and type of the specified hole?
* **USE CHECKED BY**
	+ Have someone check your drawings, it could save your grade.
* **PART NUMBERS**
	+ Carefully consider part numbering.
* **ASSEMBLIES AND SUB ASSEMBLIES**
	+ Do you have a Bill of Materials table?
	+ Do you have a Revisions table?

## Assemblies:

* **SELECTING FIRST PART TO ENTER**
	+ Everything is based off of the first part entered, so choose wisely.
* **SUB ASSEMBLIES then ASSEMBLIES**
	+ Build your proper Sub-Assemblies and then combine them into the final.
	+ Make subassemblies “flexible” that have components that should move.
* **MATES**
	+ Remember you can mate Part Planes.
	+ Lock concentric mates that should rotate together.