Concepts I
Introduction to CAD

Tuesday 3rd Week

Feedback on Kogan #1

TA’s will hand back homework during lab section
- TA’s and I graded homework together
- If you have issues with grading these must be brought to me not the TA’s as they will not be allowed to change scores

The three most common problems were:
- Don’t know definition of assembly, detailed drawings
- Non professional language /spelling /grammar
- Didn’t read question/Incomplete answers (i.e. missing cross section)
- Plagiarism??
- Did not attempt every question.
- Did not align views
What is I-DEAS?

- I-DEAS is a window based solid modeling program used by several large companies such as Ford, NASA and Lexmark.

- Why did we choose I-DEAS over PRO-E, TurboCAD and AUTOCAD?
  - I-DEAS offers us the ability to provide you access to a professional solid modeling program containing CAD/CAM/CAE.
  - It is server based so you can access via your laptop at any time.
  - Nearly unlimited licenses so maximum number of people can be logged on and using the system as possible.
  - Cost effective alternative that is gaining market share.
  - Similar GUI interface so you can transition to any of the programs within a week.

What is CAD/CAM/CAE?

- Provides seamless, continuous integration of every stage of design.

- CAD
  - Computer aided drafting
  - Learn & use all of 1st year, as well as Junior year.

- CAM
  - Computer aided machining
  - Learn & use these functions in Junior year.

- CAE
  - Computer aided engineering
  - ME’s will learn & use these function in senior year.
How will we learn CAD?

- One can only learn CAD by actually creating objects and 4-view drawings; thus you will learn through several types of experiences.
  - In class demonstrations – everyone working together
  - Structured tutorials – will be assigned as homework
  - Independent assignments connected to Thursday labs

- Let’s get familiar with the how the tutorials work
  - Text explains actions
  - Tool icons and button icons augment but do not replace text
  - Pictures of parts as they progress

How do we connect to I-DEAS?

- Through the terminal link you installed on your computer on Thursday.

- Your laptop does not have the memory or RAM to support this large program so you access remotely.
  - Your laptop is just a dummy terminal.

- To increase speed make sure your color settings are at 256 or 32-bit.
  - This is a highly graphic intensive software, sending more than is needed will slow your performance.

- During the hours of 11am to 3pm on Tuesday you may only log onto the system during your lab hours.
  - I will sever your connection if your logged on outside your lab time
  - Why? To many people logged on simultaneously will slow the performance and I want max. performance during lab times.
Don’t be tempted

- You might think we can not identify students who copy files (i.e. don’t do their own work), however it is easier than you think.

- File copying will not be tolerated and first offenses will be subject to honor code review.

- Your files have been locked to ensure protection.

- You must save your files in d:\students\<your login id>. Files found outside this domain will be deleted weekly.

What are we doing in lab?

- Today we will work through Tutorial #1 together.

- Then you will begin working on Tutorial #2 at your own speed.

- Tutorial #2 is due Oct 19th.
  - To complete this assignment you will need to work ~1 hr per night beyond the class time we provide.
  - If you wait until the last minute the server maybe slow and possible crash due to excessive load – incomplete assignments due with this excuses are still incomplete and thus late.
  - Think ahead.

Think ahead.