DOWNLOADING LATEX
Adapted from the work of BILL MEEKS and BEATA SHUSTER

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Step 0. Make a directory named 370 (or whatever you want) where you will keep all things related to this course.

1. For Windows users

In order to run Latex you will have to download **2** programs in this directory 370.

- Please make sure you choose the save option when downloading.
- Before you download each file, please carefully read through the instructions.

The precise steps may depend on how your laptop is set up. So there may be some more steps in between or there may be fewer steps.

1.1. **The first download: MiKTeX.** To download and install MiKTeX, do the following:

1. Go to

http://miktex.org/2.9/setup

to open the MiKTeX download site in a new window.

Date: ?

2. Download the basic MiKTeX system by clicking on the link that says <u>Download "Basic MiKTeX" Installer</u>. (This link is listed under the heading "Installing a basic system"). Clicking on that link will open a Download page.

- If olffered to choose a localtion, choose the one that's nearest to you.
- Then click on the 'Download' link corresponding to that location.
- A 'File Download' window will probably pop up after a few seconds - choose to save the file.

Pay attention to where you save the file. It doesn't matter where you save it, but you will have to find it later.

3. After the MiKTeX system download has finished, find the downloaded file, and double-click on it to launch the installer. Follow the directions in the installer. Some things to watch out for while installing:

- When it asks you for the directory in which to install the files, we recommend leaving the default

  C:\Program Files\MiKTeX 2.9

  but if you choose to change it, make note of where you change it to: you will need this information when installing TeXnicCenter.
- It will ask you your "preferred paper size". North American users will probably want "Letter" (most users elsewhere in the world will want "A4").
- If it asks "Download packages on the fly", we recommend choosing the default "Yes".
- Next click on start and follow any instructions.

At this point, MiKTeX should be installed on your computer.

1.2. The second download: TeXnicCenter. Please carefully read step 6 below (in 1.2.6) because when you first open the TeXnic Center you will need the file location in step 6.

1.2.1. Next go to

  http://www.texniccenter.org/

and choose the download green button located at the top. This will bring you to another site which will allow you to download.

1.2.2. Click on "TeXnicCenter Installer". (Beware of advertisements after clicking!)

1.2.3. A 'File Download' window will probably pop up after a few seconds - choose to save the file. Then, click on TXCSetup and then click on run and follow directions to install TeXnicCenter.

1.2.4. Once the download is finished, run the TeXnicCenter program that you just downloaded. We recommend accepting the default options, including to add a desktop shortcut icon when you are asked.

1.2.5. If you elected to have a shortcut on the desktop, just click the icon on the desktop. Otherwise, click Start on the main Windows window, then 'All Programs', then 'TeXnicCenter', then choose the TeXnicCenter option.

1.2.6. When the program starts, a Tips window will open. Click Close.

The program will then walk you through the configuration wizard: If it asks you for the "full path of the directory where the executables" are located, type:

$$\boxed{\text{C:\\Program Files\\MiKTeX 2.9\\miktex\\bin}}$$

(Note: if you changed the default location when installing MiKTeX, then you'll need to replace $\boxed{\text{C:\\Program Files\\MiKTeX 2.9}}$ with the directory to which you installed MiKTeX. Be sure to include the space between the X in MiKTeX and 2.9; also, watch out for the capital letters.)

- If it asks you to pick a PostScript viewer, you may just leave everything blank and just click "Next".
- Similarly if it asks you to pick a DVI viewer, just leave everything blank and click "Next". (It may or may not ask you these things, depending on how your computer is configured.)

2. **For Mac users**

The original address suggested for Mac Users (at "OpenWetWare") does not work any more.

One should choose some other source to download Latex. Since I do not have Mac I can not check which source is optimal.

One problem in choosing your own source is that some sources may offer downloads which are not complete.

The lesser problem is that you interface with the program may look differently. (However, this should be just a passing irritation. It may be convenient (or not) to have a Miktex based version version of latex for Macs. A significant feature of MiKTeX said to be its ability to update itself by downloading new versions of previously installed components and packages, and an easy installation process. Also it can ask users whether they wish to download any packages that have not yet been installed but are requested by the current document

3. **For Linux users**

This is a similar situation.

4. **Your first LaTeX document**

You are now ready to use LaTeX. the following is a test to make sure that everything works.

The test is described in terms of the Windows interface. Please adjust for Mac or Linux.

- First go to " <u>File</u>" and then to " <u>New</u>". From "New", choose " <u>New Project</u>".
  Caution. At this pount you want an empty file. So, if the <u>file opens</u> with a template then you should erase it (by "Select all" and "Cut" or whatever works). [Templates will later be useful.]
- Next copy in to your file the following sample text:
  \documentclass{article}
  \begin{document}
  hello world
  \end{document}
- Now save the file as "hello".
  Caution. The latex system may prefer (not always) that the latex files have names that end in ".tex". In that case the correct name would be "hello.tex".
- Look at the top options, sort of to the right.
  There is a drop down menu that probably says "Latex⇒DVI" click on that menu and change it to "Latex⇒PDF".
- There are several buttons that could be used to <u>process</u> the latex file you have just created. You want the one that both *builds* an <u>ouput</u> and presents it to you to *view* (it may say something like " <u>Build and display</u>"). The button you want is usually the second one on the right (in this group of buttons). It looks like a stack of papers with an arrow pointing down.
- A pdf page should come up. It shoule read hello world.