

## How to Get Started Using LaTeX

This is NOT a manual for using LaTeX, but rather instructions for installing TeX on a Mac or PC. We've also included instructions for compiling a TeX file on Euclid if you don't have your own computer.

### Installing TeX on a Mac

There are many ways to do this, but here is the easiest way that I know of. I'm assuming that you are running at least Mac OS X 10.4. If this is not the case, then talk to Dana Ernst and/or Eitan Angel. The following steps will provide you with TeTeX (the backend) and TeXShop (the frontend) for FREE. OK, here we go.

1. Go to <http://www.ctan.org/tex-archive/systems/mac/mactex/>
2. Click on the *download* link next to *MacTex.dmg*.
3. Select a download site from the list (the U.S. sites are towards the bottom of the page).
4. Click the *ftp* link. This will begin downloading the MacTeX disk image to your computer.
5. Once the disk image has been downloaded to your computer, double-click the *MacTex.dmg* file.
6. Now, double-click the *MacTex.pkg* file and follow the instructions to install.

Alright, now that you've installed the necessary software, you're ready go. You'll probably never have to deal with TeTeX again. All you need to worry about is using TeXShop, which should be located in your Applications folder. Open up TeXShop and start typing. The program is fairly easy to use, but if you have questions, ask me or Eitan.

There are quite a few programs out there for typesetting LaTeX besides TeXShop. However, TeXShop is fairly popular and not difficult to use. Another popular one is iTeXMac, which can be found at

<http://itexmac.sourceforge.net/>.

### Installing TeX on a PC

The simple answer: Google "miktex". More directly go to

<http://www.miktex.org/2.5/Setup.aspx>

and click on *Download "Basic MiKTeX" Installer*. Then install and you can be TeXing in no time. If you use notepad or some other editor, this is all you need. The snazzy Windows editor for TeX stuff is called WinEdt. Again, the simple answer is to Google "winedt". More directly, go to

<http://www.winedt.com>

and you'll see a download page from there. It is shareware, so it complains after a while. Another popular frontend is TeXnicCenter, which is free. If you need help, ask Jason Hill and/or Hugh Denoncourt.

## Compiling a TeX file on Euclid

There are two ways to go here. If you have access to a unix computer in your office, then using LaTeX is fairly easy. There is no installation required. Here is a list of steps for compiling in this situation:

1. Open up a text editor and type your document.
2. Save your document as a .tex file (like *myfile.tex*).
3. Open up a Euclid terminal window.
4. While in the directory where your TeX file is located, type the command *latex myfile.tex*. This will compile your TeX file.
5. If there were any errors, reopen the file in the text editor and make the necessary changes.
6. Recompile using the above command until you are error free. This will automatically create a file called *myfile.dvi*.
7. If you wish to view your document before printing, type the command *dvi myfile.dvi*. Alternatively, you can open the file with a previewer.
8. Now, type the command *dvips myfile.dvi* on a command line. This will print your document at the printer in the math office.

If you don't have access to a unix computer and you don't have your own computer, then there is still hope. You can access Euclid remotely to compile a TeX file. Here is one way to do that.

1. Go to MATH 217, find a machine that works, and write your LaTeX code on Notepad.
2. Put this file on your Euclid account with SSH. If you don't know how to do this, ask someone.
3. Compile the file using the command *latex myfile.tex*.
4. Type the command *dvips myfile.dvi*.
5. Go pick up your work from the printer in the math office.

Using LaTeX in this way is kind of a pain in the butt. If you need to edit your TeX file to fix errors or add something you forgot, you either need to SSH the file back to the computer you are working on or edit the file using a text editor (like Pico) on Euclid.

Whether you access Euclid remotely or directly from the unix computer in your office, you can use the command *pdflatex myfile.tex* instead of *latex myfile.tex*. This will (of course) create a file called *myfile.pdf* instead of a *.dvi* file. If you are accessing Euclid remotely, DO NOT send the *.pdf* file to the printer from Euclid. Instead, SSH the *.pdf* to the computer you are working on and use Adobe Acrobat (or something similar) to print. If you are using a unix computer, open up your *.pdf* file using a pdf viewer and print from there.