INSTRUCTIONS FOR DOWNLOADING, INSTALLING & CUSTOMIZING LATEX

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There are different "distributions" of LateX for Windows and other operating systems. Perhaps the most popular is `MiKTeX` . It has worked well for me in the past. The following steps will help you download, install, and customize it on your PC. The following instructions are specific to Windows (v10), but steps there also exist versions for Mac and Linux. Download steps for those operating systems should be similar to the ones for Windows.

Preparation: Make sure you have a pdf reader, such as `Acrobat Reader` or `Acrobat Pro` installed on your computer.

1. Downloading & Installation of MiKTeX

This is the underlying package that drives all use of LaTeX typesetting in all other software programs, such as RStudio, which will be our main platform for this course.

(1) On your PC, create a folder `c:\miktex` .
(2) Go to `miktex.org/download`. Click on the "Windows" tab, and "Download" at the bottom of the page.
(3) Open the installer window (if it doesn't open automatically). Accept the copyright conditions and click "next." Select "Install MiKTex only for me." Click "next."
(4) As destination folder, choose `c:\miktex` . Click "next."
(5) Under "Settings", select "Letter" for paper size, and "Yes" for "Install missing packages on-the-fly". Click "next" and "Start" - this may take a while. When the installation is complete, click "Next."
(6) Keep the "check for updates now" box checked and click "next." Uncheck the "Tell me more" box and close the wizard.
(7) Open the MikTex console (listed under programs when you click on the window symbol in the lower left corner of your screen). Select "check for updates." Keep all new packages selected and click "update now." You can now exit the program.

2. Downloading, Installing & Customizing TeXnicCenter

This is a LaTeX editor that allows you to create free-standing LaTeX / pdf documents. It is also a fall-back option if something goes wrong creating pdf's via Sweave in RStudio. So you should definitely install it, or an equivalent LaTeX editor of your choice.

(1) On your PC, create a folder `c:\TeXnicCenter`.
(2) Go to `http://www.texniccenter.org`. In the ***top menu bar***, click on "Download". This opens the download page. Click on "TeXnicCenter 2.02 Stable." Chose the version that fits your operating system (32 bits or 64 bits). Wait a few seconds for the download to start. Ignore the "SourgeForge" or any other solicitation window.

(3) Open the Installation wizard (tab at left hand bottom of your screen) if it doesn't open automatically, and click "Next."
(4) Accept the license agreement, click "next."
(5) Follow the Installation Wizard. **IMPORTANT:** For "Installation Directory", choose `c:\TexnicCenter`.
(6) Click "next" four times, then "Install". This will be fast. Click "Finish".
(7) The **configuration wizard** will start.
(8) Click "OK" if the English language window pops up. Click "next" in the welcome screen.
(9) Under "Enter the full path of the directory where ... your TeX distribution is located - if this field is not yet completed, enter: `c:\miktex\miktex\bin\x64` .
(10) Under "Enter the full path of the PostScript viewer to use, your local pdf software should already be selected (mine is `c:\Program Files (x86)\Adobe\Acrobat 2017\Acrobat\AcroDist.exe`. Ignore the other two white fields and click "Next". Click "finish", and close the "Did you know..?" window.
(11) You should see the main view of TexnicCenter. In the white window at the top, you should see `LaTeX -> DVI` . Change this to `LaTeX->pdf`.
(12) Choose "tools", "options", then "text format" to choose font and font size, if you wish.
(13) Choose "view" and select "line numbers" - this is useful to find a given line if you get error messages. *You may need to have a file open to select line numbers.*
(14) Do a test run. Download the file "testscript.tex" (posted on Canvas) to your `latex` folder. Open it in TexnicCenter. Click on "build and view current file" (icon in top menu with stack of paper and magnifying glass). You should see a flurry of commands in TexnicCenter's output window (at the bottom), as TexnicCenter will first download and install any packages that might be missing. Ultimately, a new Adobe pdf file with the compiled text should open. If you get an error message, try closing all other open pdf files before trying again. Else try closing & re-opening TexnicCenter. If you still run into trouble, check out the next section.

3. Trouble shooting TexnicCenter if Acrobat doesn't open files

(1) In TexnicCenter, Click on "Build/Define Output Profiles". Click the "Viewer" card.

(2) For "Server", type `acroview` , if you're using Acrobat Reader 9 (you need to do this for all three fields labeled "server").
(3) If you're using **Acrobat Reader 10**, type instead `acroviewR10` .
(4) If you're using **Acrobat Pro 10** type instead `acroviewA10` .
(5) If you're using **Acrobat Reader 11**, type instead `acroviewR11` .
(6) If you're using **Acrobat Pro 11** type instead `acroviewA11` .
(7) Analogous for other versions of Acrobat - either acroviewA* or acroviewR*, where * is the version number. (Acrobat Pro 2017 = acroviewA17)

If your Tex file compiles without error, but Acrobat doesn't open it (it only launches), **change the following settings in Acrobat**: Under Edit / preferences, choose the "General" tab, and De-select the "open documents as new tabs..." box.

NOTE: As you run LaTeX files either via RStudio or TexnicCenter, missing packages are downloaded automatically from the internet, and installed to your local `c:\miktex` directory. So initially, make sure you're online when you work with LaTeX. At some point you will have all packages you typically need on your local drive and should be able to work off-line.