Below is instruction on how to setup ssh connection to CourseLab machines. It is adapted from a precept handout of COS318.

Conducting a CourseLab Terminal Session

• *The COS 318 course uses the CourseLab computer cluster. The cluster consists of 2 computers named courselab01 and courselab02. Both use the same file system.*
• *The first time you log into a CourseLab computer, you will be using an impoverished computing environment. Only after you configure the Bash shell (see the "Configuring the Bash Shell" section of this document) will your environment be reasonable.*
• *Your computer communicates with a CourseLab computer via any terminal application that can use the SSH (secure shell) protocol. Two such programs are PuTTY (for MS Windows) and Terminal (for Mac OS X).*

Repeatedly throughout the semester as required…

1. Option 1: Use a computer running Microsoft Windows.

    (If you're working off-campus) Perform the instructions on this web page to use SRA (secure remote access): http://helpdesk.princeton.edu/kb/display.plx?*ID=6023*

    Install PuTTY.
    > *If your computer is running Microsoft Windows and you did not purchase your computer through Princeton in recent years, then you may need to download and install PuTTY. To do that:*
    > Use a web browser to visit the page http://www.putty.org/.
    > Click on the "You can download PuTTY here" link.
    > In the resulting page, click on the "putty.exe" link.
    > In the "File Downloading" dialog box, click on the "Save" button.
    > In the "Save As" dialog box, choose some appropriate location in your local file system.
    > Then launch PuTTY by double-clicking on the putty.exe file via Windows Explorer.

    Launch PuTTY.
    > Using Windows Explorer, double-click on the putty.exe file.

    Log into the CourseLab computer.
    > In PuTTY:
    >> Click on the "Window | Colours" Category, and make sure the "Use system colours" checkbox is checked.
    >> Click on the "Session" Category.
    >> In the "Host Name (or IP address)" text box, type "courselab.cs.princeton.edu".
    >> Make sure that the "Port" text box contains "22".
    >> Make sure the "Connection type" radio button panel is set to "SSH".
    >> Make sure the "Close window on exit" radio button panel is set to "Only on clean exit".
    >> Click on the "Open" button.
    >> If a "PuTTY Security Alert" dialog box appears, click on the "Yes" button.
    > In the PuTTY window:
    >> In response to the "login as:" prompt, enter your login id. If an "Access denied" message appears, ignore it.
    >> In response to the "password:" prompt, enter your password. (The password will not echo as you type.)
    >> Confirm that the PuTTY window displays a Linux shell prompt.

    Use the CourseLab computer via PuTTY as desired.

    Log out of the CourseLab computer.
    > In the PuTTY window, issue the `exit` command to disconnect from the CourseLab computer. (PuTTY will exit automatically.)

2. Option 2: Use a computer running Mac OS X.

    (If you're working off-campus) Perform the instructions on this web page to use SRA (secure remote

access: http://helpdesk.princeton.edu/kb/display.plx?ID=6023

Open a Terminal window.
> Launch Spotlight by clicking on the magnifying glass icon at the right side of the menu bar. Type "Terminal" in Spotlight. In the resulting pop-up list click on "Terminal".

Log into the CourseLab computer.
> In the Terminal window:
>> Issue the command `ssh yourloginid@courselab.cs.princeton.edu`.
>> If an SSH-related message appears, enter "yes".
>> Enter your password. (The password will not echo as you type.)

Use the CourseLab computer via the Terminal window as desired.

Log out of the CourseLab computer.
> In the Terminal window, issue the `exit` command.

Close the Terminal window.
> Click on the red button at the upper left of the Terminal window.

Copying Files between CourseLab and Your Computer

- *The FileZilla application uses SFTP (the secure file transfer protocol) to copy files between the CourseLab file system and your computer's file system.*

One time only...

1. Download the FileZilla client from http://filezilla-project.org/ and install it.

Repeatedly throughout the semester as desired…

2. (If you're working off-campus) Perform the instructions on this web page to use SRA (secure remote access): http://helpdesk.princeton.edu/kb/display.plx?ID=6023

3. Launch the FileZilla client application.

4. In the FileZilla client application:
   In the "Host" text field type "courselab.cs.princeton.edu".
   In the "Username" text field type your login id.
   In the "Password" text field type your password.
   In the "Port" text field type "22".
   Click on the "Quickconnect" button.

5. In the FileZilla client application:
   Repeatedly click in the left-side pane to navigate through your computer's file system.
   Repeatedly click in the right-side pane to navigate through the CourseLab file system.
   Drag-and-drop the name of the desired file from the right pane to the left pane, thus copying the file from the CourseLab file system to your computer's file system. Or drag-and-drop the name of the desired file from the left pane to the right pane, thus copying the file from your computer's file system to the CourseLab file system.

Another way is to use Sublime STFP on your Sublime text editor. Here's the link.