

Getting Started with MATLAB on Mac OS X

The 1105 lab computers are 32-bit Apple PowerMac G4s with 256 MB of RAM, a 40GB hard drive, a CD-ROM drive and a mouse. *Please do not put fingers or pencils/pens on the computer screens! Fingers leave grease spots and pencils/pens can damage the screen.*

Log In and Change Your Password

Login

The machines in 1105 are connected to a central server. You can thus log in to any computer in the lab. Choose a computer and log in using your assigned user name and password.

Change your password

Before continuing you should change your login password to prevent access to your lab files by others. Please do not share your new password with anyone else.

- Select the *Apple* icon on the standard menu bar at the top of the screen.
- Select *System Preferences* from the *Apple* pull-down menu.
- Select *Accounts* from the *System* row.
- Click on the *Change Password* button. Enter your current password and then enter your new password twice.

You can close the *System Preferences* window by clicking the red button in the upper left corner or by selecting *Quit* from the *System Preferences* menu.

Check that your password has been successfully changed by selecting *Log Out* from the *Apple* menu (confirming the log out if necessary) and then logging back in.

Set Your Finder Preferences and Window Configurations

The *Finder* is the Mac OS X program used locate applications and utilities, manage windows, and copy and delete files.

Set your finder preferences

To set your finder preferences:

- Click on the *Finder* icon (shaped like a half face) in the menu bar at the bottom of the screen.
- Select *Preferences* from the *Finder* menu at the top of the screen.
- Uncheck *Hard disks*, *CDs/DVDs/iPods*, and *Connected Servers* from the first list. This simply removes the respective icons from the *Desktop*.
- Set the *New Finder Window* to show *Home*.

- Check *Open new folders in column view*.
- Close the *Finder* preferences window.

Configure the *Finder* window appearance

It will be useful to give the *Finder* window a standardized appearance to match that used by the TA on the overhead projector. To configure the *Finder* window default settings:

- If you have closed the *Finder* window, start another by clicking on the *Finder* icon.
- From the *View* menu select *as Columns*.
- Select *Customize Toolbar* from the *View* menu.
- Set the *Show* menu at the bottom to *Text Only*.
- Drag items to or from the toolbar at the top of the window until the first three are *Path*, *View*, and *Action*.
- Click the *Done* button.

From the column on the left side of a *Finder* window, drag *Documents*, *Movies*, *Music* and *Pictures* to the desktop. They will disappear in a puff of smoke. Close the *Finder* window when finished.

Configure the *Dock*

The menu bar at the bottom of the screen in Mac OS X is called the *Dock*. The *Dock* contains icons that are short cuts to applications and documents. In general we will not use most of the applications that are placed in the *Dock* by default. To simplify the appearance of the *Dock*, click and drag the icons for the following applications to the *Desktop*:

- *iChat*, *iTunes*, *iCal*
- *Address Book* and *Mail*
- *System Preferences* (quit if necessary before removing)
- the @ icon

Each icon will disappear in a puff of smoke. Note that you can always move these applications back to the *Dock* later if necessary.

Next we will want to place MATLAB in the *Dock* for easy access. To do this:

- Open a *Finder* window by clicking on the icon in the *Dock*.
- In the finder select *Applications* and then *MATLAB701*.
- Click and drag the *MATLAB7.01* application icon from the *MATLAB701* folder to the *Dock*.
- Close the *Finder* window.

To run an application from the *Dock* simply click once on the application icon. Applications that are running have a small triangle next to them. To switch between running applications (e.g., between MATLAB and the *Finder*) just click on the application you would like to use.

Running and Quitting MATLAB

To run MATLAB, simply click on the MATLAB icon in the *Dock*. As the application starts up the following happens automatically:

- An *X* icon will be added to the *Dock*. This indicates that the X-Server application has started. (The X-Server is the application governing the appearance of windows in MATLAB.)
- A window labeled *xterm* will appear. The *xterm* window has a command prompt that accepts all the standard Unix commands (for those of you familiar with the Unix OS).
- The MATLAB command interface will start.

To quit MATLAB simply type the command *quit* in the MATLAB command interface. You can then close the *xterm* window by typing *exit* at the command prompt or by simply clicking the red button in the upper left corner.

Creating an ATMO336 Short-Cut on Your Desktop

Many of the ATMO 336 labs will require you to copy and edit script files (or m-files in the jargon of MATLAB) written by the TA and/or professor. These scripts will be located in the ATMO336 folder on the central lab server so that everyone can access them.

The simplest way to get the scripts is to create a short-cut (or alias in Apple-speak) to the central script folder on your desktop. To do this:

- Click on the *Finder* icon in the *Dock*
- Navigate to *Macintosh HD* (in the upper left corner) → *mot11_share*
- Click and drag the *ATMO336* folder to the desktop while simultaneously holding down the *Command* (or clover-leaf) and *Option* keys

If the display shows that you are copying (rather than short-cutting) the *ATMO336* directory then you likely forgot to hold down the *Command* and *Option* keys while you were dragging the folder. You will then have to delete the folder—by dragging it to the trash—and try again. Make sure that you hold down the *Command* and *Option* keys until you have completely released the folder with the mouse. Also make sure that the resulting *ATMO336* folder on your desktop has a small black arrow in the lower lefthand corner—this indicates a short-cut rather than a copy.

If successful, you should now have a short-cut folder called *ATMO336* on your desktop. You can now access the script files and other contents of the *ATMO336* folder simply by double-clicking the short-cut.

Creating Your Personal Figure Folder

The figures for the ATMO 336 lab will be turned in electronically (rather than in printed form). To do this you will first need to create your own personal figure folder on the lab server. When you finish making a figure you can then simply ‘turn it in’ by copying it to this folder.

Create Your Figure Folder

To create your figure folder:

- Click on the *Finder* icon in the *Dock*
- Navigate to *Macintosh HD* → *mot11_share* → *ATMO336* → *Figures*
- Click on the *File* heading at the top of the screen and select *New Folder* from the drop-down menu
- Rename the folder as *username_fig* where *username* is your login name

Make sure to use an underscore—and not a space—between *username* and *fig*.

Make a Short-Cut to the Folder

Probably the simplest way to turn in your figures is to create a short-cut to the figure folder on your desktop. To create the short-cut simply drag the *username_fig* folder to the desktop while simultaneously holding down the *Command* and *Option* keys (as described above for the *ATMO336* short-cut). (If you happen to have closed the *Finder* window after the previous step then you will first need to re-open the *Finder* window and then navigate to the appropriate location.) You can then turn in your figures by simply dragging them to the short-cut on the desktop.

Logging Out

To log out, first quit each of the running applications and then select *Log Out* from the *Apple* menu at the top of the screen. Be sure to confirm that you have in fact logged out before you leave.