1) Clicking: Left, right, and trackpad
- Like on PCs, Macs are operated with a mouse/pointer/arrow/cursor that moves around the screen as you control it. Most of the arrows, pointers, and blinking cursors your mouse becomes on a Mac are the same or similar to those on a PC. One that’s different is a spinning beach ball indicates a program is working very slowly or has frozen up.
- There are different hardware options for controlling the mouse:
  - Mac laptops work with traditional mice but have trackpads installed below the keyboard.
  - Mac desktops come with mice and can work with trackpad accessories and 3rd party mice.
- Left click is the default to do if someone says to “click” without specifying left or right.
- Click the trackpad with one finger to do a left click.
- Click the trackpad with two fingers to do a right click. Right clicks usually pull up options.
- If you connect a mouse to a Mac that has separate left and right click buttons, those buttons work just like they do on a PC.
- If you ever lose track of where the mouse is on the screen, wave your mouse around wildly back and forth and the icon will temporarily dramatically increase in size so you can find it.

2) Menu bar
- The Menu bar is the bar that runs all the way across the top of a macOS device.
  - It contains the Apple Menu, application menus, and the status menu along with Spotlight search.
  - The only time this bar moves or disappears is when you enter Full Screen mode (more on this later), otherwise, you can always depend on it being there for you.
  - Single click items within the menu bar.

3) Apple Menu
- This is similar to the Start Menu that Microsoft Windows PCs have had for ages.
- Single click the Apple logo in the upper left hand corner of your screen:
  - Then click About this Mac to see information on your Mac including operating system version, hard drive space, and support and service.
  - Then click System Preferences to open up the Mac equivalent of the Microsoft Windows Control Panel for customizing settings.
  - Then click Force quit to open the Mac equivalent of the Microsoft Windows Ctrl+Alt+Del menu for quitting out of frozen programs.
  - Then click Sleep, Restart, or Shut down to go into a low power mode, turn off then back on, or turn off your Mac respectively.
  - Then, if you have multiple users enabled on your Mac (most people don’t), click Log out to log out of one user to switch to another.
4) Application menu(s)
   - **Application menus** are menus with unique commands for each program. When you switch between programs, application menus change automatically.
   - These are menus like **File, Edit, View, Insert, Format, Paragraph**, etc.
   - They are always immediately to the right of the Apple menu.
   - The first application menu, in **bold font**, is the name of the program you’re currently in.
   - The other application menus are menus specific to that program.
   - **Single left click on the name of an application menu to see options, then click an option or hover to see sub-menus and options.**
   - **Single left click in any blank space to exit an application menu without doing anything.**

5) Status menu
   - Located in the upper right corner of your Mac.
   - Items in the status menu are a sort of heads-up display for quickly seeing info.
   - These include your **internet connection (usually WiFi), battery life, day, and time.**
   - Programs you install can add extra controls in the status menu.
   - You can add a volume controller or remove items you don’t need using the **System Preferences** application (more on this later).
   - **Hold the ⌘ Command key + drag status menu icons to reorder them.**
   - **Single left click status menu items to see more information. Like application menus, there may be options to click and/or sub-menus. Click a few to see what they do.**

6) Desktop
   - Like on a PC, the desktop is what first loads when a Mac is powered on.
   - You can place files and folders here, but most Mac users leave the desktop blank and load files in pre-made Documents, Downloads, Music etc. folders.
   - **Single click buttons in Menu bar and Dock.**
   - **Double click icons on the desktop to open them up.**
   - Let’s **double click on Remote Printing** to practice.
   - **Single click the red circle in the upper left corner to close that window.**

7) Finder
   - **Click the light blue/dark blue happy two face Finder icon.**
   - This is the program you use to find and open files on a Mac.
   - Different locations where files may be on your computer are on the left side of finder. (If they’re not there, enable this in Menu bar > View > Show Sidebar).
   - **Single left click any of the Favorite locations, such as Applications, Desktop, Documents, or Downloads to see what happens.**
   - **Now, click into Documents.**
Click to change your view options. The four options, from left to right, are icons, list, columns, cover flow.

Depending on how you’re browsing for files and folders, different views may be more efficient at certain times.

- The icons view is great for previewing pictures before opening them.
- The list view is great for browsing file names, types, or when files were modified.
- The column view is best when browsing through lots of folders, sub-folders, sub-sub-folders, etc.
- Cover flow is a sort of combination of the icons and list views, showing you previews and detailed information about files and folders.
- Open programs or files in Finder by double left clicking them.
- You can open folders in finder by double clicking them, or single click arrows that appear in certain views to the left to expand them.
- As an exercise, let’s click into Applications, double click into the Audacity folder, and then double click on the Audacity program icon to open that up. Click the red circle to close it.
- The gear button shows options including creating a new folder.

Use the Search box in the upper right corner to search. By default it will search your whole computer (“This Mac”), but you can click a folder name to search only that folder.

- As an example, let’s search for Arduino, which is a program installed on library Mac computers.
- Eject flash drives or CDs and DVDs by clicking the ▲ up arrow eject button to the right of their names under Devices in the far left side section of Finder.

8) Window management
Resize, move, minimize, and unminimize windows
- Let’s keep Finder open to show you how to manage windows in macOS.
- To resize a window, move your mouse onto the exact edge of the window on any of the four sides or four corners. Click and hold and drag your mouse to change the size until it suits you.
  (We highly discourage using the upper left corner to resize windows because you may accidentally click the red close circle. Instead, use the lower right corner.)
- To move a window without changing its size, click and hold on the window name at the top center and drag the window around.
- To minimize (temporarily hide a window without closing it), click the yellow circle in the upper left corner. This hides the application in the far right side of the Dock next to the trash bin.
- Single left click the small thumbnail preview of your minimized window to expand it back to full size.
Full screen windows

- PCs have something called *maximizing* a window. This means making it take up the entire screen except the bottom task bar.
- Macs do not have that sort of traditional maximizing. Instead, they have something called going *full screen*.

*Left*, a normal desktop. *Right*, a maximized or “full screen” Mac application.

- **Full screen** creates a new virtual desktop with your window taking up 100% of that screen.
- **NOTE:** Not all Mac apps work in full screen view, unlike maximizing windows on a PC.
- In the Finder window we have open, click the green circle in the upper left to go full screen. Watch the animation to understand what it’s doing, expanding over into a new “screen”.
- The purpose of this feature is to allow you to be super focused on one task—organizing files and folders in finder, reading email in a web browser, typing a document in a program like Microsoft Word, etc.
- There are three ways to exit full screen view.
  - On the trackpad, **swipe left or right with three fingers**. This returns you to the desktop, leaving the full screen window available to three finger swipe back into later.
  - On the keyboard, hold the **esc** key for a couple of seconds. This usually restores the window down to its previous size.
  - Move up to the top edge of the screen, and then push a bit further up. The controls will reappear in the upper left corner, and you can click the **green circle** to exit full screen.

Closing and Quitting

- To close the window of an application with the ability to reopen it quickly, click the red circle in the upper left corner of its window. Let’s practice this on Safari. Single left click its icon (pictured left) in the Dock to open Safari.

- Closing a program with the **red circle** doesn’t quit out of it. You can always tell which program is currently active by looking at the **bold** name next to the Apple menu in the upper left corner of your screen.

- To 100% quit out of a program, click its program name (let’s use Safari again) and then click the **Quit** option.
Force Quit

- Like on PCs, sometimes Mac applications freeze up. On a PC, the famous Ctrl+Alt+Del menu allows you to quit out of these misbehaving programs.
- **Force Quit** is the equivalent on a Mac.
- We find it in the Apple menu.
- Before we demonstrate Force Quit, let’s open up a few programs from the bottom bar Dock—any you pick are fine.
- You probably won’t need to use Force Quit very frequently, but when you do, odds are that having a ton of programs open is why.
- **Click into the Apple menu, and then click Force Quit.**
- A list of all of currently open programs will appear. To force one of them to quit, simply click on it and then click Force Quit in the lower right. And then confirm by clicking Force Quit again.
  - If you click on Finder in the list, instead of saying “Force Quit” the button in the lower right will say Relaunch because you always have to have Finder open to deal with files, folders, saving, downloads etc.
- **You may be asked to confirm that you really want to force the application you picked to quit. You can choose to Cancel or actually Force Quit the application. Let’s actually click Force Quit for an example.**

9) Dock

*Opening applications, seeing what’s open, editing the dock*

- Just to review: to open a program, we can single click on its icon in the dock.
- We can always see which programs are currently open by looking for the black dots below icons in the dock. Dock icons that don’t have black dots beneath them are 100% closed.

![Dock with black dots below icons](image)

- We can move items in the dock to change their order by simply clicking and dragging them around. Release when you like their location.
- **Remove an application from the dock by two finger right clicking it, then under Options select Remove from Dock. Let’s practice this with Photos.**
- If you ever see an icon bouncing up and down in the dock it usually means:
  - The application is opening slowly and your Mac realizes it too
  - The application wants to be updated
  - The application needs to alert you to something
- **The dock does not necessarily show all of the programs installed on a Mac. To see all programs on a Mac, press the F4 key on your keyboard. (Press F4 again to exit this view.)**
Let’s click on **Calculator** to open it.

- Notice how it adds itself to the right side of the dock? If you were to quit Calculator, its Dock icon disappears.

- But let’s two finger right click the Calculator icon in the dock. Hover over options and then click **Keep in Dock** to keep a shortcut to the calculator in your dock even when the calculator isn’t open.

### Trash bin, ejecting discs and drives

- The trash bin is where we place files and folders we want to delete. You can either literally drag items in to the trash bin or you can **right click on a file** and then select **Move to Trash**.

- There are two ways to safely remove anything you’ve plugged in to a Mac such as a flash drive, external hard drive, CD, DVD, etc.
  - **From the desktop, drag it toward the trash bin.** The trash bin will change into an eject button. Once that happens, release and the flash drive will prepare to be ejected. Once its icon has disappeared from the desktop, you can physically remove it from the computer.
  - In **Finder**, under **Devices** on the left side, any device that can be removed like that will show a small eject button on its right side. Click the eject button to prepare it to be removed. Once its icon has disappeared from the Devices list, you can physically remove it from the computer.

### 10) Keyboard: Differences, shortcuts, Function keys

- There are a few differences between Mac and PC keyboards.
- Let’s open the **blue W Microsoft Word** from the Dock to have somewhere to type. **Double click on Word Document** to open a document to type in. **Type out a few sentences**.
- There is no **backspace** key on a Mac keyboard. Instead, there’s only **Delete**. Oddly, this **Delete** key does what backspace does on a PC, removes text to the left of where you’ve clicked. To remove characters to the right of your cursor, use the shortcut **Fn+Delete**.

- Instead of a PC Windows button there is a **⌘ Command button**.
- The command button is used in most keyboard shortcuts (like Command+C to copy something you’ve selected) instead of the Ctrl key on a PC.
- Let’s quit out of Microsoft Word with the shortcut **⌘ Command+ Q**.
- Click **Don’t Save** if a window appears.
The top row of keys operate as shortcuts rather than standard Function keys which can be used differently by each program.

- **New MacBook Pros have a changing touch screen “Touch Bar” instead of the Function keys.**
- **ESC** - typically escapes out of things like full screen modes
- **F1** - decrease screen brightness
- **F2** - increase screen brightness
- **F3** - opens and closes “Mission Control” for organizing windows (shortcut: swipe up from the bottom of your trackpad with four fingers)
- **F4** - opens/closes all programs “Launchpad” swipe between its pages with two fingers
- **F5** - decrease keyboard backlights
- **F6** - increase keyboard backlights (sensors override manual keyboard lighting)
- **F7** - rewind/previous for music or video programs
- **F8** - play/pause for music or video programs
- **F9** - fast forward/next for music or video programs
- **F10** - mute/unmute volume
- **F11** - decrease volume
- **F12** - increase volume
- **فائزة** - power button to turn on computer, hold for about 5 seconds to shut your computer down if it 100% stops responding.
- Other keys work exactly as they do on PCs.

### Spotlight search

1. In the far upper right of the menu bar is a magnifying glass. This is **Spotlight search**. It’s Apple’s brand name for searching your local computer. Results include files, folders, and programs installed on your computer.
2. **Click the magnifying glass or type the keyboard shortcut ☩ Command + Space bar** to open Spotlight search. As soon as it’s open, you can start typing in a search.
3. **Let’s search for text as an example.** Spotlight may try to complete your search before you finish typing it in, such as textEdit or TextWrangler. Try other searches to get a feel for this.
4. You may need to do multiple searches with different keywords if it doesn’t turn up the files you’re looking for.
When it does turn up useful results, double click them to open. Let’s use TextEdit.

Let’s quit out of textEdit with the shortcut ⌘ Command+ Q. If it asks, click Don’t Save.

12) Wifi
- Another important part of the menu bar we want to highlight is the Wifi controller.
- Single left click to open it.
- It should be connected to eapl-public-wifi.
- You can click to connect to any network from the list of ones detected. If it requires a password, your Mac will ask you for that info as soon as you click. Meraki is another library network.
- If you have trouble with Wifi, click Turn Wi-Fi Off to turn it off. Wait a few seconds, and then click Turn Wi-Fi On to turn it back on again.

13) System Preferences
- To open System Preferences, left click on the Apple Menu.
- Then, click System Preferences…

- What should open is the macOS equivalent of the Windows Control Panel.
- Settings are split into different categories. Let’s click on Trackpad as an example.
- Each individual category of System Preferences will look different. Read any screens in System Preferences carefully to know what to click. There may be tabs of sub-sections as well.
- You can use either the < > Back and Forward buttons or the grid squares button to navigate around in System Preferences. Let’s go back to the main screen.

- If you’re not sure what section of System Preferences you need to be in, use the search box in the upper right corner. System Preferences will give you search suggestions and highlight likely categories for you to try.

- Quit out of System Preferences by clicking System Preferences in the upper left and then Quit System Preferences, or use the keyboard shortcut ⌘ Command+ Q.
14) Siri

- Apple added Siri when they sent out the macOS 10.12 Sierra update.
- Siri is a digital assistant. It can look up some basic information for you on the fly.
- Click the **Siri icon** in the **Dock**. Siri appears in the upper right corner of your screen.
- Once you hear a double chime, start talking.

- Stop talking when you’ve finished your question, and Siri will think and try to answer.
- (Often Siri answers are not the greatest.)
- But Siri can search your files, search the web for images to drag into documents, search sports scores, weather, tell jokes, and more. We encourage you to experiment.
- After you’ve asked one question, click the **microphone button** to ask another. Siri is **supposed** to understand connections between previous and subsequent questions.
- Using your **trackpad** or the **scroll bar**, you can scroll up/down through the questions you’ve asked Siri at one time.
- Click the **X** in the upper left of the black Siri menu to close out of Siri.
Recommended Additional Resources:

**Other technology classes**
Go to [http://www.eapl.org/events](http://www.eapl.org/events) to view and signup for other computer classes.

**Class handouts**
Go to [http://eapl.org/events/computer-programs/class-handouts](http://eapl.org/events/computer-programs/class-handouts) to download handouts and files.

**Librarian and computer aide assistance**
We are glad to help you out at the second floor reference desk as best we can while helping others.

**Help appointments**
Ela Library cardholders can schedule one-on-one appointments with librarians for further help. We can help with our Digital Media Labs or with general technology questions in our areas of expertise. Appointments last up to one hour. Paper appointment request forms are available at the 2nd floor reference desk. You can also request appointments online:

- Go here [http://www.eapl.org/DMLhelp](http://www.eapl.org/DMLhelp) to sign up for a Digital Media Lab appointment.

**Tech Tutoring**
The last Wednesday of some months, a tech savvy librarian is available for six 30 minute tech tutoring appointments. Bring a list of questions and we’ll help with as many as possible. Limit one tutoring appointment per month per patron. First registered first served, no library card required. Go to [http://www.eapl.org/events](http://www.eapl.org/events) to register for a session.

**Databases**
The Library offers card holders access to many premium databases at [http://www.eapl.org/resources](http://www.eapl.org/resources), including:

- **Gale Courses** offers a wide range of highly interactive, instructor led courses that you can take entirely online. As an Ela Area Public Library card holder in good standing, you are entitled to these courses at no cost. Courses run for six weeks and new session begin every month.
- **Lynda.com** offers technology training with over 20,000 training videos on over 300 topics with exercise files included. The Library pays for you card holders in good standing to access this resource, however you will be required to create a free account. *Please remember to log out when you are finished.*

**Books**
A few books in the library collection related to this book are:

- **MacOS Sierra** by Paul McFedries  
  Call Number: 005.446 MAC/OS SIERRA
- **MacOS Sierra for seniors**  
  Call Number: 004.0846 SENIORS

**Laptops and iPads**
Check out a laptop or iPad for use in the library for up to 2 hours. More info: [http://eapl.org/laptops](http://eapl.org/laptops)

**Free online tech training websites**