Computer Concepts for Beginners

Got Computer?

THE WORLD AT YOUR FINGERTIPS
Greetings

- Hi, my name is Tony & we’re about to take a big plunge into the computer world! For some of us, this might be the first time we’re actually using our computers, so this tutorial will take things nice & easy. For those who already feel comfortable with computers, feel free to browse the handouts/videos. Who knows—you might find some handy tips or new techniques to use.
- This tutorial is meant to steer you in the right direction as computer users, but even after working through this guide there’ll still be a lot of work to do! Practice, *practice*, *practice* is the key to getting more proficient with your machine.
- Note: Any words in *italics* will be defined in the glossary at the back of the handout.
- As a quick word of caution, neither myself nor the library can be responsible for any changes/damages made to your computer from the result of this tutorial package, so be careful!

![Image of a room with laptops set up on a table]

Philosophy

- Remember—things might look complicated, but the overwhelming options that your computer gives you are simply *shortcuts* for doing a few basic things.
  - There are many ways to perform *one* function!
- Computers are machines—they operate based off of commands & they need maintenance just like your automobile.
  - They will only do what you tell them to do!
- If you’re a true beginner, remember that computers are meant to make life easier, so as soon as you feel frustration creeping in—take a step back, take a deep breath, and try, try again 😊
Physical Breakdown

- This is a typical desktop computer, some parts may look different but the components all serve a similar function. If you’re practicing with a “laptop” computer, the same rule applies.

  - **Monitor**: this is the computer’s display. It looks & works just like a TV screen—this is where you see what’s happening on your computer.
  
  - **Computer Tower**: this is where the brain of your computer lives. Sometimes, the tower is called the "Central Processing Unit" or CPU.
  
  - **Mouse**: this is the main way to interact with your computer. It’s imperative to get comfortable with this device—you’ll be using it to tell your computer what to do. There’ll be more on how to use a mouse later...
  
  - **Keyboard**: this is another way to interact with your computer. It’s been modeled after a traditional typewriter, so those functions should carry over smoothly. There are command shortcuts that you can use instead of clicking the mouse—there’ll be more on this too...

- On any given day, most of what you do will involve computer systems. The TV channels you watch, the music you listen to, the car that you drive, and even the cash register at the local grocery store are all controlled in some way by computer systems...simply put, they help us perform complicated tasks & keep track of a great deal of information. During the course of this class, you’ll learn a little about how they work & how to use them—and who knows, maybe even a little more!
Getting Started

Turning on the Computer

- When you get behind a computer, you can assume that it’s in one of two states:
  - **Off**: this is exactly what it sounds like. The computer system is completely powered down—as good as being unplugged from the wall. The monitor will be blank with nothing on it, there’re no sounds coming from the tower, & the system is unresponsive to the mouse. The “power” switch is usually located on the front of the tower:
  - **Sleep Mode**: if left alone, modern computers’ll go into something called "sleep", where it’s “on” but in an energy-efficient mode. To wake it up, simply move the mouse around or press any key on the keyboard & it’ll come back to life at exactly the same place where it went to sleep.
- If your computer locks up or freezes for whatever reason, you can hold down the “power” button to manually force the computer to power down. You will only want to do this if the computer is not responding to any of your commands—be careful with this, you can lose data or corrupt files with a sudden power loss.

- Logging on
  - Once your computer is on, the monitor will go through a series of tasks before it is ready for your commands (this might take a few moments). If everything’s working as it should, you’ll see a log-on screen like this:
  - These are called "Log On" windows & they allow your computer to be password protected. If you’re at a public computer, like at the library, you should assume there is an additional log-on process for the given institution.
So, What’s Next?

- **Desktop**: your computer sounds reach what’s known as the “desktop” within a few minutes of powering-up. Here you have a digital representation of a real desktop—complete with a workspace, files, folders, & even a trash can!
  
  - The desktop contains the “icons” & “shortcuts” that provide access to some of the commonly used programs on the computer. Once you are familiar with your computer, you can create your own shortcuts.
  
  - The desktop is also customizable—you’re able to manipulate, alter & change almost everything about your desktop. For instance if you don’t like the color of your background, you can change it using the “control panel”, but more on that later...

- In this way, your desktop will look different from everyone else’s. Sometimes it depends on which “operating system” you’re using—this will be covered later as well. Here’re a few screenshots of what your desktop might look like:

![Windows XP](image1.png)

![Windows Vista](image2.png)

![Windows 7](image3.png)

![Apple/Mac](image4.png)
Using a Mouse

- The mouse is used for navigating around the monitor & interacting with the computer via “clicking”:

- You can tell where your mouse is on the computer screen by looking for the “cursor”.

- Clicking:
  - Click = press once on the left button
  - Double-click = press twice on the left button quickly (keep the mouse still while double-clicking)
  - Right-click = for an advanced “tools” options (if you accidentally use the right-click, left-click on an empty portion of the screen to close out of its menu)

Each mouse has similar functions—left-clicking is used far more often than right clicking. Using a mouse takes coordination, finesse, and precision—but every time you practice, you will get better!

A mouse lets you quickly select text, move items & open/close applications on your computer. Although many of the functions of the mouse can be replicated with the keyboard, you’ll likely find the mouse to be more straightforward to use.

- For now, remember these rules:
  1. The left mouse button SELECTS items.
  2. The right mouse button GIVES YOU MORE OPTIONS.
  3. Double-clicking the left mouse button EXECUTES options.
  4. Double-clicking the right mouse button DOES ABSOLUTELY NOTHING!
- Practice, practice, practice!
Using a Keyboard

- The keyboard is used for all the typing you will do & resembles a typewriter.
  - Some keyboards are ergonomic, mini, or full-sized, but all have similar functions:
    - **Number Pad** = some keyboards have a number pad with the numbers grouped into a square for easy data entry. To use the number pad, you must turn off the “Num Lock” function. Go ahead—see if you can find the “Num Lock” key.
    - Hint: it’s usually on the upper-right hand corner of the number pad 😊

- **About the keys:**
  - In order to get the most out of your computer experience, you must input commands using *both* the mouse & the keyboard. The above image of a keyboard will closely resemble the one you’ll use—learning just a few keys will help to improve your efficiency in typing as well as present you with more options within programs. Here’s a list of commonly used keys that have special functions (functions can change depending on which program you are using):

  1. **Backspace**: this key deletes backwards as you type
  2. **Delete**: this key deletes forwards as you type
  3. **Shift**: this key, when pressed WITH another key, will perform a secondary function, like capitalizing text
  4. **Spacebar**: this key enters a space between words as you type
  5. **Tab**: this key will force the cursor to indent or jump to another entry field like the ones between *username & passwords*
  6. **Caps Lock**: This key will present the capitalized version of each letter key.
  7. **Control (Ctrl)**: This key, when pressed WITH another key, performs a shortcut.
  8. **Enter**: This key executes a command (pressed in Microsoft Word, it begins a new line)
  9. **Number Keypad**: this is a redundant keypad existing only for user preference.
  10. **Arrow keys**: Like the mouse, these keys are used to navigate through the document.
Moving Forward

Now that you know how to *interface* with your computer (using the mouse & keyboard), here’re a few concepts that’ll help you get around the desktop & the digital world:

- **Icons**: A graphic, picture or symbol that represents a program, application or file.
- **Shortcuts**: A direct route to open an application that saves time—most shortcuts open a program by double-clicking. A shortcut icon has an arrow graphic near the bottom to indicate that the icon is a shortcut to a program or file.
  - Icons/shortcuts can be moved around, created & deleted on your desktop—if you find you’ve deleted a shortcut, your program is probably still on your computer, you’ve just gotten rid of its shortcut.
  - Here’re some examples of what icons/shortcuts might look like:

    - Recycle Bin
    - Microsoft Office W...
    - Windows Media Player
    - Launch Inter...

- **Taskbar**: Window’s way of helping you see the programs that are open, or being currently used. The taskbar also holds shortcuts to commonly used things on your computer.
  - Remember that Windows is capable of running more than one program at a time. In this way, you can be writing a letter in Microsoft Word, surfing the Internet, all while checking your email! This is where the taskbar becomes extremely helpful—it helps you keep track of what you’re doing. To use one of the programs that is open, simply left-click on its corresponding place on the taskbar to bring to back to life.
  - Depending on which version of Windows you’re using, here’s what the taskbar might look like:

    - Each taskbar button represents an open program (a “task in progress”)

    or

    ![Taskbar Example](http://www.phon.ucl.ac....)
Windows and 3-D Viewing: Microsoft Windows is called "Windows" for a reason—programs appear on your screen as windows & are laid 3-dimensionally on top of one another:

- It’s important to not get flustered when trying to negotiate through these windows—just remember that as trying as computers can be, they’re merely tools meant to make life easier, so let’s try to treat them that way 😊

Operating Systems

- By now, you’re probably noticing that computers can look different depending on which you’re using. These differences can be caused by the computer’s operating system. So, what’s an operating system?
  - An operating system (OS) is a program designed to help users harness the power of the computer without them knowing specific computer languages and protocols. The OS that average computer users interface with doesn’t require knowledge of special codes or languages, only that a person knows how to point the mouse & click on icons. The OS is a very complicated program that acts as the brain of the computer, allowing you to run programs, work on projects, and do basically everything that computers are capable of.
  - The most popular operating system is Microsoft’s Windows, but even it has separate versions—XP, Vista, 7. There are other operating systems as well—Apple, or MAC OS, uses its own which runs under the same basic principles.
  - The glossary has more on the functions & different types of operating systems 😊
The START Menu—The Best Way to Your Computer’s Heart

- You’re just about ready to start surfing the web & opening programs on your computer. One thing I’d like to point out before doing so is the START menu. For Windows, this list of programs & applications is the gateway to find what network (if any) you belong to, what software is installed on your computer, and what files (pictures, documents, music, etc.) is saved in which folders.

- The START menu can be found on the lower-left corner of your screen—it’s opened by left-clicking:

  ![Start Menu](image)

  Different versions of Windows have different looking START menus, but all serve the same basic idea: a way to see inside your computer.

This is an open START menu as it appears using Windows XP

- Popular programs, like Internet and Email software are on the left, while folders, files, control panel, search and help features are on the right.

- Logging-off & Shutting Down—It’s important to note the "Log Off" and "Turn Off Computer" buttons on the bottom of the menu. Consider these your "ignition" for the computer. If you want to shut it off, this is where you go!
• Essential folders & icons that you’ll need:
  o “My Documents” = A folder that’s unique to your computer—it will hold documents that you’ve saved to your computer (unless you’ve directed it to do otherwise):
  o “My Pictures” = A folder meant to hold the pictures you’ve loaded:
  o “My Music” = Just like the previous folder, it will hold the audio you’ve loaded onto your computer!
  o “My Computer” = This offers a look at what’s going on within your computer, as well as what you have connected to it (hint: your computer’s main drive is the C:\drive 😊)
  o “Internet” = Most likely, this will be your way to hop online. Most Windows computers will have Internet Explorer loaded, but you’re always free to use the browser of your choice:

• Other things to note on the START menu:
  o “All Programs” = This is a list of every program that you have on your computer:
  o “Help” & “Search” = Great ways to find what you’re looking for:
  o “Control Panel” = Once opened, this menu will give you options to customize your computer. Here you’ll find central categories like appearance, printers, network, programs, performance, & security:
Jump into it!

- Now, you should have a basic working knowledge of using your personal computer (unfortunately, Mac users notwithstanding). As for what’s next, I’d suggest taking the plunge into what interests you. The next page will list descriptions of possible areas to explore with your computer—each area has a lot of components & requires time to build proficiency, so if you find yourself getting discouraged, remember the philosophies from the beginning of the tutorial:
  - Remember—things might look complicated, but the overwhelming options that your computer gives you are simply shortcuts for doing a few basic things.
    - There are many ways to perform ONE function!
  - Computers are machines—they operate based off of commands & they need maintenance just like your automobile.
    - They only do what you tell them to do!
  - If you’re a true beginner, remember that computers are meant to make life easier, so as soon as you feel frustration creeping in—take a step back, take a deep breath, and try, try again 😊

Looking to make a purchase?

- If you don’t already own a computer, or are looking to find some support for your product, here’re some useful resources when you’re in the market:
  - **Consumer Reports:** Paper copies can most likely be picked up at your local library, or please contact me & I’ll get you the latest ratings/reviews on PCs 😊
  - **Dell:** A popular provider of consumer PCs #1-800-WWW-DELL
  - **Fry’s:** Offers a wide variety of products at good prices #1-800-856-9800
  - **Best Buy:** Selection & staff gives you an opportunity to narrow your focus #1-888-237-8289
  - **Apple:** A fantastic way for you to see what the digital world has to offer #1-602-977-0285
Areas of Interest: Practice & Have Fun!

(Feel free to contact me if you’d like more info on any of these areas—this tutorial cannot hold *everything* you need to know)

- **Email**: To check your email account, or to create a new one altogether, you’ll need to open an Internet browser (p.11), then type your email address’ host website into the *address bar* at the top of the screen:

  ![Sign In - Windows Internet Explorer](image)

  So, if your email is *morningbreath@hotmail.com*...your host website would be “hotmail.com”. From there, you’ll need to login by either entering your password or creating an account.

- **USB Ports** (Plugging in your digital devices): Your computer should have ports, either on the front or on the side, that look like this:

  ![USB Ports](image)

  Most modern gadgets will plug-in using these ports—digital cameras, iPods, flash drives, etc.

  Once plugged in (& the device is on), you can go to “My Computer” (p.11) to explore the drive:

  ![Sample flash drive icon & digital camera icon](image)

  - To open & explore the device, double-click on the icon—you’ll then be presented with an interactive list of the stored files. From here, you may move/delete/copy the files.

- Please see the glossary for more in-depth walkthroughs of accessing your email & using USB ports.

  **Remember**: *You’re in control, so have fun, & practice, practice, practice...*