

### 1.1 Computer Basics Lesson Plan

## Prior to Class

## Student Computer Setup:

1. Copy the Student Folder onto each desktop.
2. Place shortcuts to the following documents on the student desktop:

- Mouse Practice
- Keyboarding Practice
- File Management Practice

3. Prepare printed copies of the following:
a. 1.7 Computer Basics Session Survey
b. 1.8 Computer Basics Certificate if pre-printing certificates
c. 1.0.1 Computer Basics Student Manual

## Instructor Computer Setup:

Ensure that the LCD projector and computer are working properly.
Complete the Student Computer Setup on the presentation computer.
Open the following documents on your computer and then minimize them so only your desktop appears.

- Computer Basics Presentation
- Mouse Training Presentation
- Keyboarding Presentation
- File Management Presentation
- Mouse Practice Spreadsheet


## In Class

Tell students that Computer Basics is a two to four hour course designed to familiarize students new to computers with basic computer terminology, hardware, software, input (mouse and keyboard) and output (document) devices, as well as the Microsoft Windows file structure.

Complete introductions. Ask if any have prior experience. Explain that we will only be going over basics because this is an introductory course. Ask about their expectations... i.e.: "What do you hope to learn today?"

Maximize the Computer Basics Presentation (PPT).
Go through the PPT slides using the information below to guide you. Ask students to take notes in student handbook (dotted lines are provided in the handbook for this purpose) when necessary. ENCOURAGE students to stop you if they have any questions.

## Learning Goals

- Describe why computers are important
- Explain how computers work
- Explain the difference between computer hardware and computer software
- Describe what an operating system is
- Identify the operating system you have on your own computer and phone.
- Explain office productivity and communications software.
- Start up and shut down computers properly
- Use the mouse and keyboard to complete tasks on the computer
- Identify the different groups of keys on the computer
- Create, open, save, and manage files and folders


## Why is it important to know how to use a computer?

Computers are everywhere and everyone is using them! Computers are in our cars, our kitchens, our living rooms, our stores and, most importantly, in our workplaces. They are used to communicate, to play, and to make everyday tasks easier (once you know how to use them!). The ability to use a computer will enhance your ability to not only keep in touch with friends and family but it will also increase your ability to find and keep a job.

## WHAT IS A COMPUTER?

An electronic device that accepts data (input), manipulates the data (process), produces information based on the manipulation (output) and stores the results (storage).

The computer performs 4 basic functions


| Input | $=$ eyes, ears, mouth \& nose |
| :--- | :--- |
| Processing | $=$ brain |
| Output | $=$ verbal \& non-verbal reactions |
| Storage | $=$ you have control /important keep $/$ not imp. Delete |

What types of things can you do, already do or want to do on the computer? (pause for responses, contribute if needed) Can we do these things without a computer?

YES... so...

The question is, "why pay so much money for a machine that does things we can already do without the machine?"

## WHY WE USE COMPUTERS TO DO WORK WE COULD DO WITHOUT A COMPUTER?

Speed: Computers can process data much faster than we can.
Accuracy/ Computers don't get sick (without help!), they are not
Reliability: distracted by loving or hating you, they don't care what you look like etc...
Memory: Computers are able to store and recall instantaneously, huge amounts of data

## 5 BASIC COMPUTER SYSTEM COMPONENTS

(1) Input: A device we use to put information into the computer. List as many as we can think of.
(2) Output: A device we use to see the results of the computer's manipulation of the data we input. List as many as we can think of.
***How many devices can we think of that are both input and output.
(3) Central Processing Unit (CPU=Control Unit and Arithmetic Logic Unit):

Control Unit interprets the instructions (traffic cop),
Arithmetic Logic Unit performs the arithmetic and logical functions (addition, subtraction, multiplication, division, equals, not equal, equal to or greater than, equal to or less than, greater than, less than...)
(4) Memory. Memory is what makes the computer so darned fast - the ability to go from point A to point $Q$ without having to pass through $B, C, D, E$, etc. in order.

- RAM (Random Access Memory RAM $s$ is where the computer holds data while it is needed for processing. It is volatile in that it loses its contents when the machine is turned off.
- ROM (Read Only Memory): a set of chips that contain instructions that help a computer prepare for processing tasks. These instructions are permanent. The only way to change them is to remove the chips and replace them.
(5) Storage: Hard Drive, Floppy Disk Drive, CD drive, Memory Sticks, etc... Discuss pros and cons of each storage method


## COMPUTER PROGRAMS

A computer program is a set of step-by-step instructions that tell the computer how to perform a specific task. Without computer programs your computer is merely a really expensive paper weight!

Operating System Software: This software works with the operating system. It controls how you, the software, and the hardware work together Windows, Apple, Android, and Chrome are common operating systems. Computers and laptops usually use Windows or Apple. Cell phones and tablets usually use Apple, Android, or Chrome software.

Application Software: Software the computer uses to carry out a task as specified by the user.

- Word Processing: enter, edit, format and print documents containing primarily, but not limited to text.
- Spreadsheet: enter, edit, format, print, sort and calculate primarily numeric data.
- Communications: email and the internet
- Education and Entertainment: Tutorials, Testing, Simulation, and Games (multimedia)


## Students Turn On \& Login to Computers

- Review desktop screen components. Have students move their mouse over the components but they do not need to click on anything yet.
- You may need to teach Ctrl/Alt/Del and/or the shift key for students to be able to log into the computer.


## Mouse Instruction \& Practice

Remind students that the mouse is one form of input.
Maximize the Presentation on Mouse Training (PPT) and present to students

- Click
- Right Click
- Drag and Drop
- Double Click
- Click and Drag

Mouse Practice Instructor demonstrates (SLOWLY if need be).
Show students how to access and open the Mouse Practice document on their desktop by double clicking. This may be difficult for some. If they cannot double click, teach them how to right-click and choose Open.

Repeat the Mouse Practice as students follow along.

## Keyboard Instruction \& Practice

Remind students that the keyboard is another form of input.
Maximize the Presentation on Keyboard Training (PPT) and present to students
Open Keyboard Practice document and walk students through the use of each of the below.

- QWERTY (regular keys)
- Directional Keys for scrolling
- Numeric Keypad if on computer
- Shortcut Keys Ctrl/Atl/Del to log in; Ctl/C; Ctl/V

Keyboarding Practice - Instructor demonstrates (SLOWLY if need be) on overhead After demo, instructor repeats while students do at their computers.

File Management Instruction \& Practice

Presentation on File Management: Refer students to the File Management Terminology section in their Student Manual.

- Importance
- My Computer
- My Documents
- Folders
- Subfolders
- Files
- File Naming Conventions
- File Types


### 1.6 File Management Practice - Teacher Version

It will be easier if the instructor prints a hard copy of the File Management Practice to refer to as the instructor goes through the steps.

The Instructor demonstrates (SLOWLY if need be).
Once the demonstration is completed, students will follow the printed instructions in their Student Manual for 1.0.4 File Management Practice Instructions as the instructor calls them out.

Because these instructions require students to open up a new Microsoft Word document on their computers, students should NOT open the 1.0.4 File Management Practice file on their computers.

## Additional Online Resources and Information in Student Manual

Show the student the 1.0.5 Computer Basics Online Resources document on the screen. Have them find the document in the student folder on their desktop and open it. Ensure they can use the $\mathrm{Ctr} /$ Mouse Click to open the links.

Then, depending on the student skill levels and time constraints, you can choose to cover any additional material in the student manual or on the resource list.

## ASSIST STUDENTS WITH COPYING THEIR STUDENT FOLDER FILES TO THEIR OWN USB DRIVE OR THEIR OWN ONLINE DRIVE.

### 1.7 Computer Basics Session Survey

Ask students to complete the printed hand out 1.7 Computer Basics Session Survey and collect these before students leave.

### 1.8 Certificate of Completion. Depending on your printing situation, do one of the following:

- Call students up one at a time to print their Certificate of Completion from your computer. You can ask them to type in their own names. Sign their certificates.
- If no printer is available in the lab, have pre-printed certificates available and write or pre-type student names. Sign certificates before the class so they are ready to distribute.

Instructor Notes: $\qquad$
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