IPC Lecture Notes:

Code has to be loaded onto RAM, then into CPU.

Buses – Cables in computer, ex cables used to transfer data between phone and computer (USB cable), other ex landline cable. Buses transfer instructors between hardware

ROM (Read Only Memory) – Non-volatile, safes data when power off unlike RAM.

Start up process – OS loaded into RAM from store device, HDD or SDD. Loaded into RAM by BIOS, BIOS runs a check on every device in machine to make sure it’s running right. BIOS choose the ROM

Input devices – Keyboard, mouse, mic, webcam, DVD drives

Output devices – Printer, speakers

Fundamental Informational Units:

Most fundamental unit of a modern computer is the binary digit or bit. Can be distinguished between voltage, with voltage (1) without (0). Bit is not the physical unit of storage

Fundamental addressable unit of RAM is the byte. Byte is a combination of 8 bits

256 bits in a byte was decided upon because it covered the alphabet, the keyboard

Unicode (universal code)– has 2 bytes, covers every character in the world

4 bits equivalent to hexadecimal

Binary Conversion (Watch YouTube video to recall this stuff):

245 = 2 \* 100 + 4 \* 10 + 5 \* 1 = 100111101

1101 = 1 \* 2^3 + 1 \* 2^2 + 0 \* 2^4 + 1 \* 2^0 = 13

20 = 10100