

Component 4: Introduction to Information and Computer Science

Unit 1: Basic Computing Concepts, Including History

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Selecting a Computer

- There is not one "best" computer
- Depends on needs
 - Users
 - Applications
 - Storage
 - Mobility
 - Budget
- Can change quickly due to frequent improvements in technology and price

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How to decide?

- Determine your budget
- Look at the requirements for the applications you need to run
- Determine how much storage you will need
- Research online using up to date reviews and buying guides

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Options for Computer Systems Home/Business User (July, 2010)

- Desktop with a budget of \$1,000 (doesn't include monitor)
 - Dual or Quad core processor (2 – 4 processors)
 - 6 – 8 GB of RAM
 - Separate graphics card
 - 500 GB – 1 TB hard drive
 - DVD drive with burner
 - Latest OS
(Windows 7 or Mac OS X Snow Leopard)
- Upgrades available for more memory, faster graphics card, Blu-ray drive/burner

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Other Options for Desktops

- Case
 - Tower
 - All in one
 - Small form factor
- Video Card
 - Integrated video on cheaper chips
 - More expensive, separate video card with own graphics memory speeds video

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Other Options for Desktops Monitors

- Most are LCD panels (TN, VA, IPS)
 - Size (20, 22, 24 inches)
 - Aspect Ratio (4:3, 16:10, 16:9)
 - Brightness (more for movie and games)
 - HDMI and DVI connections
 - USB ports
 - Ergonomic adjustments
- Bottom line: test out the monitor for what you want to do with it

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Other Options for Desktops Printers

- Ink jet
 - Inexpensive, slow
 - Affordable color printing
 - Good for home use
- Laser Printer
 - More expensive
 - Fast, handle many jobs
 - Color ones are much more expensive than B/W
- All-in-Ones
 - Printer, copier, scanner, fax
- Portable ink jet printers
 - Battery or car charged

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Printer Specs

- Resolution
 - Measured in DPI
 - 600 x 600 DPI means 600 dots across by 60 dots down in one square inch
 - Higher resolution means sharper, more detailed output
- Print Speed
 - How many pages per minute can be printed
- Connectivity
 - USB
 - Wireless
 - Ethernet for group printing
- Cost to print
 - Cost of cartridge
 - How frequently need to change

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Other Options for Desktops

- Speakers
 - Basic integrated speakers or cheap 2 speakers
 - 2:1 or 5:1 (# satellite speakers: 1 subwoofer)
- Keyboard/mouse
 - Wireless available

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