

OBERLIN HIGH SCHOOL
BUSINESS EDUCATION DEPARTMENT
INFORMATION TECHNOLOGY
GRADE 9
TERM 1 (14 weeks)

UNIT 1:

1. Health and Safety (3 Weeks)
2. Foundations of Hardware and Software (11 weeks)

General Objectives: At the end of these lessons students should be able to:

1. Understand the impact of computer systems usage has on the environment.
2. Demonstrate health and safety practices while operating the computer system or handling parts thereof.
3. Demonstrate the appropriate competencies in using selected hardware devices.
4. Demonstrate an understanding of a variety of productivity tools used in today's society.
5. Understand the purpose of hardware devices and software tools in computer systems.

Prior Knowledge

Check that students:

1. Have knowledge and understanding of health and safety practices
2. Have knowledge of Ergonomics
3. Know the difference between a computer and a computer system
4. Can classify basic hardware devices as Input, Output, Storage, Processing and Communication
5. Can competently use the keyboard and mouse
6. Know the major categories of software
7. Can utilize the basic features of a Word Processing program

Specific Objectives:

At the end of this lesson students should be able to:

1. Investigate and resolve basic computer hardware problems
2. Define Ergonomics
3. Explain how Government Agencies with responsibility for Health and Safety Acts carry out their mandate in relation to ICT/IT industry
4. Discuss the impact of the use of computer usage on health, safety and environment
5. Revise judgments and change behaviour in light of health and safety practices when using computer system
6. Differentiate between Hardware and Software
7. Describe the Operating System
8. Outline the functions of the Operating System
9. Outline the different categories of Software
10. Define the term; input devices, output devices, data, processing, storage, input, output, storage device, storage median
11. Describe different input devices and their uses
12. Explain the relationship among hardware components in data processing

13. Discuss the role of the Central Processing Unit and its components
14. Differentiate between primary and secondary storage
15. Describe different storage media and their uses
16. Compare the different units of storage
17. Describe the concept of cloud computing and examine how it has impacted storage
18. Differentiate between Hardcopy and Softcopy
19. Describe different output devices and their uses

KEY VOCABULARY

- backup,
- restore
- hardware,
- printer
- monitor
- system unit,
- keyboard,
- speaker,
- install,
- reinstall,
- setup,
- software,
- troubleshoot,
- power outlet,
- carcinogenic,
- OSHA

Hardware and Software

- Central Processing Unit,
- Control Unit,
- Arithmetic and Logic Unit,
- Memory,
- Secondary storage,
- Primary Storage,
- Storage medium,
- Monitor,
- speaker,
- Printer,
- plotter,
- multimedia projector,
- Hardcopy,
- Softcopy,
- Manual,
- Automatic (Source Data Entry),

- Keyboard,
- mouse,
- digital camera,
- scanner,
- barcode reader,
- biometric reader,
- track ball,
- touch pad,
- light pen,
- Optical Mark Reader,
- Operating system,
- Utility programs,
- General Purpose,
- Custom Written,
- Specialized ,
- Custom - Written,
- Integrated,
- operating system software,
- application software,