

Lesson Plan

Course Title: Telecommunications and Networking

Session Title: Networking Fundamentals

Lesson Duration: 180-300 minutes

[Lesson length is subjective and will vary from instructor to instructor]

Performance Objective:

Upon completion of this assignment, the student will be able to setup and configure a basic network, recognize networking devices and the types of media available for today's computers.

Specific Objectives:

- Ÿ Define terms assiciated with the lesson
- Ÿ Identify various types networks
- Ÿ Identify various types networking media
- Ÿ Configure TCP/IP settings
- Ÿ Build neworking cables
- Ÿ Connect and configure a hub or switch and a PC(s)

Preparation

TEKS Correlations:

130.274(c) Telecommunications and Networking

- (1) The student demonstrates the necessary skills for career development, employability, and successful completion of course outcomes. The student is expected to:
 - (E) solve problems and think critically;
 - (F) demonstrate leadership skills and function effectively as a team member
- **(4)** The student acquires an understanding of telecommunications and data network services. The student is expected to:
 - (K) differentiate between local area networks and wide area networks
- **(5)** The student analyzes various types of configurations and upgrading. The student is expected to:
 - **(C)** distinguish between different types of cables used in the telecommunications and data networking;
 - (D) describe telecommunications and data networking media and connectors;
- (7) The student develops a network design plan. The student is expected to:
 - (C) identify common peripheral ports and common network components;
- (10) The student knows the function and application of the tools, equipment, technologies, and materials used in telecommunication services. The student is expected to:
 - (A) demonstrate safe use of equipment commonly employed in telecommunications services such as hand and power tools;