**BARTON COMMUNITY COLLEGE**

**COURSE SYLLABUS**

# **GENERAL COURSE INFORMATION**

Course Number: NTWK 1032

Course Title: Introduction to Networking

Credit Hours: 3

Prerequisite: None

Division/Discipline: WTCE

Course Description: Introduction to Networking will introduce students to the underlying concepts of telecommunications and networking. It provides a general overview of computer networks and will focus on the terminology and technologies in current networking environments. Students in business and computer fields will learn a basic understanding of networking setup and how to access data across the network.

# **INSTRUCTOR INFORMATION**

# **COLLEGE POLICIES**

Students and faculty of Barton Community College constitute a special community engaged in the process of education. The College assumes that its students and faculty will demonstrate a code of personal honor that is based upon courtesy, integrity, common sense, and respect for others both within and outside the classroom.

Plagiarism on any academic endeavors at Barton Community College will not be tolerated. The student is responsible for learning the rules of, and avoiding instances of, intentional or unintentional plagiarism. Information about academic integrity is located in the Student Handbook.

The College reserves the right to suspend a student for conduct that is determined to be detrimental to the College educational endeavors as outlined in the College Catalog, Student Handbook, and College Policy & Procedure Manual. (Most up-to-date documents are available on the College webpage.)

Any student seeking an accommodation under the provisions of the Americans with Disability Act (ADA) is to notify Student Support Services via email at [disabilityservices@bartonccc.edu](mailto:disabilityservices@bartonccc.edu).

# **COURSE AS VIEWED IN THE TOTAL CURRICULUM**

This course is an introduction to networking. The course is required for both the Computer Networking Specialist Certificate and A.A.S. The class also serves as a stand-alone for those who seek greater expertise in understanding and setting up a SOHO network. This course will ideally be completed early in the program.

# **ASSESSMENT OF STUDENT LEARNING**

Barton Community College is committed to the assessment of student learning and to quality education. Assessment activities provide a means to develop an understanding of how students learn, what they know, and what they can do with their knowledge. Results from these various activities guide Barton, as a learning college, in finding ways to improve student learning.

Course Outcomes, Competencies, and Supplemental Competencies:

1. Categorize the Basics of Networking
   1. Explain elements of a network
   2. Identify characteristics of different network protocols
   3. Identify connectivity hardware
   4. Identify certifications available to networking professionals
2. Describe the OSI Model Layers
   1. Explain protocol layers
   2. Describe specific layers within the OSI Model
3. Define Local Area Network Architectures
   1. Identify network media best suited for specific LAN environments
   2. Install and configure a NIC
4. Use Different Computer Platforms
   1. Explain the various computer platform
   2. Describe the unique relationship of a computer platform
   3. Demonstrate the use of hardware architecture and software framework
5. Use Network Operating Systems
   1. Identify the various network operating systems
   2. Explain the characteristics of a networking operating system
   3. Describe the difference between the various networking operating systems (NOVELL, LINUX, WINSERVER)
6. Analyze System Architectures
   1. Describe Ethernet transport system
   2. Explain structure and function of Token Ring network
   3. Demonstrate systems services
7. Define Internetworking
   1. Describe Wide Area Network Links
   2. Describe WAN transmission methods
   3. Describe the function of routing protocols
8. Define Telecommunications
   1. Explain concepts related to data transmission and noise
9. **INSTRUCTOR'S EXPECTATIONS OF STUDENTS IN CLASS**

# **TEXTBOOKS AND OTHER REQUIRED MATERIALS**

# **REFERENCES**

# **METHODS OF INSTRUCTION AND EVALUATION**

# **ATTENDANCE REQUIREMENTS**

1. **COURSE OUTLINE**