BARTON COMMUNITY COLLEGE
COURSE SYLLABUS

I. GENERAL COURSE INFORMATION

Course Number: NTWK 1070
Course Title: Network Security I
Credit Hours: 3
Prerequisite: NTWK 1032 Introduction to Networking and NTWK 1072 Information Security with a "C" or better.
Division/Discipline: WTCE/Networking Specialist
Course Description: Network Security I prepares students to design, implement and maintain an organization's network and computer security policies. Students analyze computer networks to determine areas of weakness in an organization's security architecture, and suggest solutions for controlling those weaknesses. Students also learn how to track hackers when security breaches occur. This course is the first course in a two course sequence which prepares students for Security+ certification.

II. INSTRUCTOR INFORMATON

III. 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.

IV. COURSE AS VIEWED IN THE TOTAL CURRICULUM

Network Security I is required for the A.A.S. Networking Specialist degree. It is the first course in a two course sequence which prepares students for Security+ certification.

V. 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:

A. Explain and Execute Compliance and Operational Security
   1. Explain the security implications of integrating systems and data with third parties
   2. Execute appropriate incident response procedures
   3. Explain the importance of security related awareness and training

B. Explain and Implement Access Control and Identity Management
   1. Explain the function and purpose of authentication services
   2. Explain the fundamental concepts and best practices related to authentication, authorization and access control
   3. Implement appropriate security controls when performing account management

C. Explain and Utilize Data Security
   1. Explain the importance of data security
   2. Utilize appropriate data security tools and products

D. Identify and Apply Cryptography
   1. Summarize general cryptography concepts
   2. Use and apply appropriate cryptographic tools and products
   3. Explain the core concepts of public key infrastructure (PKI)
   4. Implement PKI, certificate management and associated components

E. Analyze and Differentiate Threats and Vulnerabilities
   1. Analyze and differentiate among types of social engineering attacks

VI. INSTRUCTOR'S EXPECTATIONS OF STUDENTS IN CLASS

VII. TEXTBOOKS AND OTHER REQUIRED MATERIALS

VIII. REFERENCES

IX. METHODS OF INSTRUCTION AND EVALUATION

X. ATTENDANCE REQUIREMENTS

XI. COURSE OUTLINE