BARTON COMMUNITY COLLEGE
COURSE SYLLABUS

I. GENERAL COURSE INFORMATION

Course Number: NTWK 1071
Course Title: Network Security II
Credit Hours: 3
Prerequisite: NTWK 1070 Network Security I with a "C" or better
Division/Discipline: WTCE
Course Description: Network Security II 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 second course in a two course sequence which prepares students for Security+ certification.

II. INSTRUCTOR INFORMATION

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 II is required for the A.A.S. Networking Specialist degree. It is the second 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. Identify and Implement Network Security
   1. Explain the security function and purpose of network devices and technologies
   2. Apply and implement secure network administration principles
   3. Distinguish and differentiate network design elements and compounds
   4. Implement and use common protocols
   5. Identify commonly used default network ports
   6. Implement wireless network in a secure manner

B. Explain and Execute Compliance and Operational Security
   1. Explain risk related concepts
   2. Perform appropriate risk mitigation strategies

C. Analyze and Differentiate Threats and Vulnerabilities
   1. Analyze and differentiate among types of malware
   2. Analyze and differentiate among types of attacks
   3. Analyze and differentiate among types of wireless attacks
   4. Analyze and differentiate among types of application attacks
   5. Analyze and differentiate among types of mitigation and deterrent techniques
   6. Implement assessment tools and techniques to discover security threats and vulnerabilities
   7. Within the realm of vulnerability assessments, explain the proper use of penetration testing versus vulnerability scanning

D. Explain and Utilize Application and Host Security
   1. Explain the importance of application security
   2. Perform appropriate procedures to establish host security

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