**BARTON COMMUNITY COLLEGE**

**COURSE SYLLABUS**

# **GENERAL COURSE INFORMATION**

Course Number: NTWK 1072

Course Title: Information Security

Credit Hours: 3

Prerequisite: Computer experience

Division/Discipline: WTCE

Course Description: This course examines principles of information security. Emphasis is placed on the confidentiality, integrity and availability of information in a technological setting. Security awareness, analysis, design, implementation and maintenance are explored. Students, who complete this class with a C or better, earn the NSTISSI (National Training Standard for Information Systems Security) 4011 certification in Information Systems Security. (pending certification approval)

# **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.

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

This course introduces students to security aspects of information in a technological society. This course is designed for any student who wants a deeper understanding of information security. It serves as an introductory course to students in the career track of Networking Specialist in the Business, Technology, and Community Education program at Barton Community College.

# **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.

1. Establish a foundation for understanding information security and its need
	1. Explain the critical characteristics of information
	2. Identify the steps of the System Development Life Cycle
	3. Explain the business needs for security
	4. Identify common threats and attacks
2. Describe the legal, ethical and professional issues of information security
	1. Identify information security laws and policies
	2. Describe the ethical issues and codes of ethics
3. Identify the components of risk management and security planning
	1. Describe the steps in identifying, assessing, and controlling risk
	2. Explain how to select and evaluate risk controls
	3. Identify the components of a security policy and its implementation
	4. Compare contingency planning, incident response planning, disaster recovery planning and business continuity planning
4. Explain security technologies
	1. Describe a firewall and its various implementations
	2. Describe a virtual private network
	3. Identify access control approaches
	4. Explain intrusion detection techniques
	5. Explain cryptography and common cryptographic techniques
	6. Identify physical security considerations
5. Recognize how to implement security programs
	1. Describe security management practices
	2. Identify the security issues involving personnel
6. Describe how to evaluate and maintain security programs
	1. Explain the methods of monitoring and evaluating a security program
	2. Identify digital forensics and its methodology for investigation
7. **INSTRUCTOR'S EXPECTATIONS OF STUDENTS IN CLASS**

# **TEXTBOOKS AND OTHER REQUIRED MATERIALS**

# **REFERENCES**

# **METHODS OF INSTRUCTION AND EVALUATION**

# **ATTENDANCE REQUIREMENTS**

1. **COURSE OUTLINE**