

York Technical College

Course Syllabus

Course Information

Course Prefix/Number: IST 292
Course Title: Fundamentals of Network Security II
Lecture Hours/Week: 3.0
Lab Hours/Week: 0.0
Credit Hours/Semester: 3.0

[Distance Learning Attendance/VA Statement](#)
[Textbook Information](#)

Course Description: This course is the study of advanced security processes based on a security policy, emphasizing hands-on skills in the areas of secure perimeter, security connectivity, security management, identity services and intrusion detection. The course prepares students to install/configure secure firewalls.

Course Competencies:

Upon successful completion of this course, the student should be competent to perform the following tasks:

Module 1 – Planning and Design

Develop a firewall plan.
Demonstrate knowledge of firewall design.
Develop a security policy.
Identify firewall configuration strategies.
Demonstrate basic knowledge of packet filtering.

Module 2 – Applications and Security

Authenticate users using popular methods of authentication.
Demonstrate a working knowledge of proxy servers.
Identify application-level firewalls and the use of application-level firewalls.
Describe a Bastion host and determine which is best for different situation.

Module 3 – Firewall Planning and Implementations

Setup and manage a VPN.
Demonstrate knowledge of building your own firewall.
Describe basic task involved in network security administration.
Describe basic task involved in firewall administration.

Minimal Standards/Performance Objectives

Students must read the assigned material prior to class and complete all assignments. The instructor will discuss the concepts and demonstrate the methods as appropriate. Students must participate in independent as well as team activities. Students may exempt a module by completing both theory and performance pre-assessments, if applicable, with a score of at least 80% on each assessment. Students who do not exempt the modules through pre-assessment must complete each module, learning activities, and post-assessment. Modules must be completed in order. Computer Technology students must attain a grade of "C" or better in this course for the degree and certificates.

Course Requirements

Attendance

The student will attend class as stated in the York Technical College Handbook's attendance policy. Online students will participate in discussions and complete all assigned activities in a timely manner as evidence of virtual class attendance.

Academic Integrity

The student is bound by the policies stated in the York Technical College Catalog and Handbook. A student violating these policies will be subject to academic discipline.

Evaluation Strategies and Grading

Grades will be based on the average of the three module assessments.

The following scale will be the standard:

Score:	Grade:
90 – 100	A
80 – 89	B
70 – 79	C
60 – 69	D
<60	F

Final Grade:

Module 1 Assessment		% Module Grade	Course Grade
Theory/Performance Test	100	70%	
Homework & Learning Activities	100	20%	
Discussions	<u>100</u>	<u>10%</u>	
Module Grade		100%	33.3%
Module 2 Assessment		% Module Grade	
Theory/Performance Test	100	70%	
Homework & Learning Activities	100	20%	
Discussions	<u>100</u>	<u>10%</u>	
Module Grade		100%	33.3%
Module 3 Assessment		% Module Grade	
Theory/Performance Test	100	70%	
Homework & Learning Activities	100	20%	
Discussions	<u>100</u>	<u>10%</u>	
Module Grade		100%	33.3%
Final Grade			100.0%

Entry Level Skills

Keyboarding ability and fundamentals of the Windows operating system.

Prerequisites

IST 202 and IST 291

Co-Requisites

None