WILMINGTON UNIVERSITY
COLLEGE OF TECHNOLOGY
BASIC COURSE INFORMATION

COURSE TITLE: Protecting Your Network: Firewall and Perimeter Security

COURSE NUMBER: SEC 450

All courses are open to students from all colleges. Only where a course is preceded by an introduction course is there a need to observe a prerequisite. However, students might benefit from prior knowledge on some of the courses, and this is given as the content found in your course catalogue by course code.

Minimum Grade Policy
The Computer & Network Security program has set a minimum passing grade of "C-" for program core courses. Students receiving a grade lower than "C-" in any required core course must retake that course.

I. MAJOR INSTRUCTIONAL GOALS:

GOAL #1: The goals of this course are to discuss and dissect the fundamental concepts of modern perimeter security concepts with emphasis on historical attacks and practical execution. Topics include:

A. Network Perimeter Security (routers, firewalls, IDS/IPS)
B. Security Devices (routers, state devices, firewalls; review of Cisco PIX, Cisco ASA, Checkpoint NGX)
C. Public and private key encryption and digital signatures
D. Network Security (viruses, worms, Trojan horses)
E. Create the plan to keep people and machines OUT
F. Build a perimeter design to protect your network
G. Stage the design to protect your network
H. Roll the design and the rules into production
I. Monitor and maintain the security of your network (IDS/IPS devices, Nagios, BigBrother, CAUnicenter tools, etc.)

II. LEARNING ACTIVITIES:

This course is supposed to be a fun course which will teach you the fundamentals of security network and telecommunications systems in corporate environments. You will learn the basic components and functions of security, protocols, operations, and administration of networks. Most of all, you will become familiar with the tools and procedures for supporting and maintaining these corporate Internet systems.

III. CLASS PARTICIPATION:

Students are expected to attend class and participate actively and in a positive way. Questions and relevant observations are encouraged and enrich the experience of the entire class.
Computers in the classrooms are intended to be used as tools to enhance the students' learning experience. Instant messaging, gaming, emailing, and surfing the web are distractions to the student, the surrounding students, and the instructor and constitute inappropriate behavior. Students are ethically obliged to avoid these and similar practices.