WILMINGTON UNIVERSITY
COLLEGE OF TECHNOLOGY
BASIC COURSE INFORMATION

COURSE TITLE: Firewall and Perimeter Security

COURSE NUMBER: SEC 450

I. MAJOR INSTRUCTIONAL OBJECTIVES:

Objective A: Discuss and dissect the fundamental concepts of modern perimeter security concepts with emphasis on historical attacks and practical execution.

A-1 Network Perimeter Security (routers, firewalls, IDS/IPS)
A-2 Security Devices (routers, state devices, firewalls; review of Cisco PIX, Cisco ASA, Checkpoint NGX)
A-3 Public and private key encryption and digital signatures
A-4 Network Security (viruses, worms, Trojan horses)
A-5 Create the plan to keep people and machines OUT
A-6 Build a perimeter design to protect your network
A-7 Stage the design to protect your network
A-8 Roll the design and the rules into production
A-9 Monitor and maintain the security of your network (IDS/IPS devices, Nagios, BigBrother, CAUnicenter tools, etc.)

II. 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.