WILMINGTON UNIVERSITY
COLLEGE OF TECHNOLOGY
BASIC COURSE INFORMATION

COURSE TITLE: Windows Operating Systems and Systems Administration

COURSE NUMBER: SEC 340

I. MAJOR INSTRUCTIONAL GOALS:

OBJECTIVE A: Demonstrate comprehension of Windows concepts and administration
A-1: Define terms, concepts, and processes associated with the Windows Operating System, and the major differences between Windows and other operating systems.
A-2: Identify the major elements of a computer operating system and explain their functions.
A-3: Compare and contrast operating system and application system software.
A-4: Recognize and apply principles of memory management, system configuration, and the boot process.
A-5: Analyze disk management and create simple-to-complex batch files to solve a variety of problems.
A-6: Diagnose problems connected with the Registry and determine procedures for backing up the system.
A-7: Understand how to configure and maintain the operating system environment and server hardware.
A-8: Gain a basic understanding of Active Directory and its key features and benefits.

OBJECTIVE B: Demonstrate ability to effectively utilize Windows commands
B-1: Install Windows;
B-2: Navigate the directory structure;
B-3: Create, manipulate and delete data, files and directories;
B-4: Determine and modify permission settings;
B-5: Manage processes;
B-6: Write simple shell scripts;
B-7: Perform system administration functions.
B-8: Analyze a Windows Operating System situation to determine the problem and find a solution.
B-9: Select and apply the Windows commands to manage the hardware and software.

OBJECTIVE C: Demonstrate understanding of system administration tasks
C-1: Add and delete users
C-2: Monitor system usage
C-3: Mount file systems
C-4: Back up files
C-5: Understand the importance and implementation of good backups and sound disaster recovery strategy  
C-6: Understand how to maintain a secure Windows Operating System through diligent patching and solid security policies.

**OBJECTIVE D: Demonstrate understanding Network Systems Administration**

D-1: Explain how network hardware and software are applied within local area network environments.  
D-2: Learn how to setup and manage effective permissions to ensure secure access to network resources (files and printers).  
D-3: Propose and evaluate alternative local area networking solutions from both business and technical perspectives.  
D-4: Implement local area networking solutions, including various network operating systems, database servers, and web servers.  
D-5: Troubleshoot and solve local area network installation and operational problems in a multi-vendor, heterogeneous networking environment.

**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.