

**OAKTON COMMUNITY COLLEGE
GENERIC COURSE SYLLABUS**

<u>COURSE PREFIX</u>	<u>COURSE NUMBER</u>	<u>COURSE NAME</u>	<u>CREDIT</u>	<u>LECTURE</u>	<u>LAB</u>
CNS	203	Microsoft Designing Security for Windows Network	3	3	1

(Formerly LAN 203)

II. PREREQUISITE:

CNS 120 (Formerly LAN 120); or LAN 173 or consent of instructor, coordinator or program chair

III. COURSE (CATALOG) DESCRIPTION:

This course provides students with the knowledge and skills to design a secure network infrastructure, including assembling the design team, modeling threats, and analyzing security risks in order to meet business requirements for securing computers in a networked environment.

The course covers the most recent release of Windows. This course is one of the elective examinations that are required for certification in Microsoft Certified Systems Engineer (MCSE), or in Microsoft Certified Systems Administrator (MCSA), or one of the courses for the core examinations for Microsoft Certified Systems Engineer (MCSE) Security Windows curriculum.

IV. LEARNING OBJECTIVES:

Upon completing this course, students will be able to:

1. Plan a framework for network security.
2. Identify threats to network security.
3. Analyze security risks.
4. Design security for physical resources and for computers.
5. Design security for accounts and for authentication.
6. Design security for data and for data transmission.
7. Design security for network perimeters.
8. Design an incident response procedure.
9. Designing an acceptable use policy.
10. Designing policies for managing networks.
11. Designing an operations framework for managing security.

V. ACADEMIC INTEGRITY:

Students and employees at Oakton Community College are required to demonstrate academic integrity and follow Oakton's Code of Academic Conduct. This code prohibits:

- cheating
- plagiarism (turning in work not written by you, or lacking proper citation)
- falsification and fabrication (lying or distorting the truth)
- helping others to cheat
- unauthorized changes on official documents
- pretending to be someone else or having someone else pretend to be you
- making or accepting bribes, special favors, or threats, and

- any other behavior that violates academic integrity.

There are serious consequences to violations of the academic integrity policy. Oakton's policies and procedures provide students a fair hearing if a complaint is made against you. If you are found to have violated the policy, the minimum penalty is failure on the assignment and, a disciplinary record will be established and kept on file in the office of the Vice President for Student Affairs for a period of 3 years.

Details of the Code of Academic Conduct can be found in the Student Handbook.

VI. OUTLINE OF TOPICS:

- A. Introduction to Designing Security
- B. Creating a Plan for Network Security
- C. Identifying Threats to Network Security
- D. Analyzing Security Risks
- E. Creating a Security Design for Physical Resources
- F. Creating a Security Design for Computers, Accounts, and Authentication
- G. Creating a Security Design for Data, and for Data Transmission
- I. Creating a Security Design for Network Perimeters
- J. Designing Responses to Security Incidents
- K. Designing an Acceptable Use Policy
- L. Designing Policies for Managing Networks
- M. Designing an Operations Framework to Manage Security

VII. METHODS OF INSTRUCTION:

Methods include lectures, class exercises, class discussion, hands-on lab exercises.

VIII. COURSE PRACTICES REQUIRED:

- Read course materials – textbook, and Self-Test
- Attend and participate in class lecture and lab.
- Complete required assignments, exercises, quizzes, and exams.
- Complete LAN projects.

IX. INSTRUCTIONAL MATERIALS:

- Textbook and Lab book: Microsoft Official Curriculum for Windows
- Current Self-Test Software
- Software manuals

X. METHODS OF EVALUATING STUDENT PROGRESS:

Quizzes, examinations, completion of lab assignments, exercises; and several Local Area Networks (LAN) projects.

XI. OTHER COURSE INFORMATION:

If you have a documented learning, psychological, or physical disability you may be entitled to reasonable academic accommodations or services. To request accommodations or services, contact the ASSIST office in the Learning Center. All students are expected to fulfill essential course requirements. The College will not waive any essential skill or requirement of a course or degree program.