

**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 (Formerly LAN 207)	207	Microsoft Installing, Configuring and Administering SQL Server	3	3	1

II. PREREQUISITE:

CNS 111 (Formerly LAN 111); or LAN 171 or consent of instructor, coordinator or program chair.

III. COURSE (CATALOG) DESCRIPTION:

This course provides students with the knowledge and skills required to install, configure, administer, and troubleshoot the client-server database management system of Microsoft SQL Server. It covers the most recent release of Windows. This course is one of the elective examinations that are required in Microsoft Certified Systems Engineer (MCSE), Windows curriculum, and also core examination in the Microsoft Database Administration (MCDBA) curriculum.

IV. LEARNING OBJECTIVES:

Upon successful completion of this course, you will be able to:

1. Describe SQL Server architecture.
2. Plan for a SQL Server installation, and then install an instance of SQL Server.
3. Manage files and databases, including determining resource requirements.
4. Choose a login security method, configure login security, plan and implement database permissions, and describe how to help protect SQL Server in an enterprise network.
5. Perform and automate administrative tasks and create custom administrative tools.
6. Back up databases and implement a backup strategy.
7. Restore databases.
8. Monitor and optimize SQL Server performance.
9. Transfer and migrate data into databases.
10. Maintain the high availability of SQL Server.
11. Describe how to replicate data from one SQL Server to another

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. SQL Server Overview
- B. Planning to Install SQL Server
- C. Managing Database Files
- D. Managing Security
- E. Performing Administrative Tasks
- F. Backing Up Databases
- G. Restoring Databases
- H. Monitoring SQL Server for Performance
- I. Transferring Data
- J. Maintaining High Availability
- K. Introducing Replication

VII. METHODS OF INSTRUCTION:

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

VIII. COURSE PRACTICES REQUIRED:

- Read course materials – textbook and current journals.
- 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 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.