

COURSE OUTLINE

MSFT-863

Programming a Microsoft SQL Server 2000 Database

3 Semester Hours

HOWARD COMMUNITY COLLEGE

Description

This course provides students with the technical skills required to program a database solution with Microsoft® SQL Server™ 2000 client/server database management system. (3 hours lecture, 1 hour lab) Prerequisite: MSFT – 862. (3 hours lecture, 1-hour lab)

Overall Course Objectives

Upon completion of this course, the student will be able to:

1. Describe the elements of Microsoft SQL Server 2000 and the environments in which it can operate.
2. Design SQL Server enterprise application architecture.
3. Describe the elements of the Transact-SQL language.
4. Describe and configure the data storage architecture of SQL Server.
5. Create and manage files, file groups, databases, tables, and transaction logs.
6. Enforce data integrity using the IDENTITY column property, constraints, defaults, rules and unique identifiers.
7. Plan for appropriate use.
8. Create and maintain indexes.
9. Implement user-defined functions
10. Write queries that retrieve and modify data using joins and subqueries.
11. Write queries that summarize data.
12. Manage locking options and transactions to ensure data concurrency and recoverability.
13. Program across multiple servers by using distributed queries, distributed transactions and partitioned views.

14. Design and create stored procedures.
15. Design and create triggers.
16. Work with distributed data.

Major Topics

- I. SQL Server Overview
- II. Overview of Programming SQL Server
- III. Creating and Managing Databases
- IV. Creating Data Types and Tables
- V. Implementing Data Integrity
- VI. Planning Indexes
- VII. Creating and Maintaining Indexes
- VIII. Summarizing Data
- IX. Managing Transactions and Locks
- X. Implementing Views
- XI. Implementing Stored Procedures
- XII. Implementing Triggers
- XIII. Working with Distributed Data
- XIV. Programming Across Multiple Servers

About Microsoft Curriculum at HCC

When a student takes a Microsoft course at HCC, that student usually receives more instruction time than they would receive in other formats. Therefore, while taking Microsoft courses at HCC, the student may expect not only instruction from Microsoft materials but additional academic and practical exercises and course work to better equip the student not only for the corresponding certification exam but for eventual utilization in their professional endeavors.

Course Requirements

Grading/exams: Grading procedures will be determined by the individual faculty member but will include two quizzes or exams and one lab activity.

Other Course Information

This course is a Network Administration and Computer Support Technology core course.

This course is also intended for students who wish to become a Microsoft Certified Systems Engineer (MCSE) or Microsoft Certified Database Administrator (MCDBA).