

**Course Objectives/Course Outline**  
**Spokane Community College**

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**Course Title: DBMS/SQL**

**Prefix and Course Number: CIS 126**

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**Course Learning Outcomes:**

**By the end of this course, a student should be able to:**

- Understand the structure query language
- Retrieve data from any DBMS/SQL compatible database
- Insert data into any DBMS/SQL compatible database
- Modify data in any DBMS/SQL compatible database
- Delete data from any DBMS/SQL compatible database

**Course Outline:**

- I. Overview of ANSI DBMS/SQL History
- II. Tables/Databases with DBMS/SQL
  - A. Creating Tables and Databases
  - B. Understanding Data Types
  - C. Constraints and defaults
  - D. Dropping Tables and Databases
- III. DBMS/SQL Basics
  - A. DBMS/SQL Select Statement
  - B. Field List
  - C. Conditional Queries
  - D. Aliases
  - E. Sorting Data
  - F. Nulls and Empty Data
- IV. Advanced DBMS/SQL Select Statements
  - A. DBMS/SQL Select Statements
  - B. Field Lists
  - C. Conditional Queries
  - D. Aliases
  - E. Sorting Data
  - F. Nulls and Empty Data
  - G. Multiple Table Queries
  - H. Joins – Inner, Outer and Self
- I. Managing Data
  - J. Inserting Data
  - K. Updating Data
  - L. Deleting Records
- VI. Database Administrations
  - A. Building Views
  - B. Indexing
  - C. Performance Issues
  - D. Grouping Data and Aggregate Functions