

Northwest Arkansas Community College
Business & Computer Information Division

Discipline Code

CISM

Course Number

1433

Course Title

SQL Concepts

Catalog Description

This course will cover SQL as a language. Students will learn to use SQL to manipulate data in tables including triggers and stored procedures. This course will also offer an introduction to database design and data normalization. Emphasis will be given to applying student skills to real world situations. (Outside lab time may be required).

Prerequisites

None

Credit Hours

3 credit hours

Contact hours

45

Load hours

3

Semesters Offered

On Demand

ACTS Equivalent

N/A

Grade Mode

A-F

Learning Outcomes

Students completing this course will:

- Demonstrate competence in developing and maintain databases.
- Utilize SQL to Create, Retrieve, Update, and Delete data.
- Utilize SQL to create database objects including: Tables, Triggers, and Stored Procedures.
- Demonstrate competence in developing an effective Database design
- Demonstrate competence in database normalization
- Demonstrate competence in joins and subqueries
- Demonstrate competence in using aggregate functions and filtering grouped data.

Standard Practices

Topics list

- Create and alter tables using T-SQL syntax (simple statements)
- Create and alter views (simple statements)
- Design views
- Create and alter DML triggers
- Query data by using SELECT statements
- Implement sub-queries
- Implement aggregate queries
- Create and alter stored procedures (simple statements)
- Modify data by using INSERT, UPDATE, and DELETE statements
- Combine datasets
- Work with functions
- Manage transactions
- Evaluate the use of row-based operations vs. set-based operations
- Implement error handling

Learning activities

Assignments and Projects.

Assessments

Homework, Quizzes, and Exams

Grading guidelines

- A = 90-100
- B = 80-89
- C = 70-79
- D = 60-69
- F = 59 or below