Virginia Western Community College
ITD 130
Database Management Software

Prerequisites

None

Course Description

Introduces the student to Relational Database and Relational Database theory. Includes planning, defining and using a database; table design, linking, and normalization; types of databases, database description and definition.

Semester Credits: 3   Lecture Hours: 3   Lab/Clinical/Internship Hours: 0

Required Materials

Textbook:
Beginning SQL by Paul Wilton and John Colby, Wrox books - Wiley Publishing, copyright 2005 ISBN 9780764577321

Other Required Materials:
none

Course Outcomes

At the completion of this course, the student should be able to:

- Normalize tables in a database as required.
- Understand and use standard SQL to create tables, enter data • Be able to construct SQL statements to query databases.
- Understand differences in SQL language for the various databases.
- Understand database constraints and how to apply them.
- Use various GUI tools to work with database files.
- Understand how to write stored procedures

Topical Description

- Module 1: Introduction to Databases, the software and creating databases, tables and inserting data
- Module 2: Data Extraction from single tables
- Module 3: Utilizing the SELECT statement on Multiple Tables
- Module 4: Constraints, Indexes, and Normalization
- Module 5: Grouping and aggregating Data
- Module 6: Manipulating Data, Functions, and Advanced Joins

- Module 7: Views, Transactions, and Stored Procedures
- Studying for the MTA (Microsoft Technology Associates) Database Test

Notes to Instructors

- Each module (except mod 2) is two weeks long and requires both a quiz and a laboratory assignment submitted through Blackboard
- A midterm exam is required
- A comprehensive final exam is required.