

Master Syllabus

CIS 2165 - Database Management

Division: Business and Public Services

Department: Computer Information Systems

Credit Hour Total: 3.0

Lecture Hrs: 3.0

Prerequisite(s): MAT 0200

Date Revised: January 2018

Course Description:

Introduction to database management systems. Discussion of database environments, design, planning, implementation and administration in a relational model environment. Students will design and develop a simple database and implement a portion of this application including forms, queries and reports. Emphasis on database design techniques, normalization and the SQL database language.

General Education Outcomes:

- Critical Thinking/Problem Solving Competency

Course Outcomes:

Database Functions

Describe the functions of database recovery, security and administration, and basic data warehousing concepts.

Assessment Method: Locally developed exams

Performance Criteria:

70% or higher on tests

SQL and QBE

Utilize SQL and QBE commands to define, query and manipulate a relational database.

Assessment Method: Performance appraisals

Performance Criteria:

70% or higher on project rubric

Database Design and Development

Apply databases to actual situations and business problems. Complete the steps involved in database design and development. Construct and use a relational database.

Assessment Method: Performance appraisals

Performance Criteria:

70% or higher on project rubric

Database Management Systems

Define a database and describe the differences between traditional file management systems and database management systems (DBMS). Identify the concepts of the relational model, normalization, dependencies, integrity, and constraints.

Assessment Method: Locally developed exams

Performance Criteria:

70% or higher on tests

Outline:

Database management system basics

QBE and SQL

Database design

Database management system functions

Database administration

Data warehousing