

## 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):** CIS 1111OR GEO 1107

**Date Revised:** January 2014

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### 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