Outline of Instruction

Division: Business
Area: Computer Information System
Course Number: CIS 155
Course Name: Database Management Systems
Prerequisite: CIS 112
Corequisite: None
Hours Required: Class: 45 Lab: None Credits: 3

Course Description/Purpose
This course covers the process of database design, development, implementation and management. Topics covered include relational database model, object-oriented database model, structured query language, entity relationships, normalization, database life cycle and distributed database management systems.

Major Units

• Introduction to SQL
• Database Concepts
• Design Concepts
• Advanced Design and Implementation
• New Development
• Database Administration

Educational/Course Outcomes

Student learning will be assessed by a variety of methods, including, but not limited to, quizzes and tests, journals, essays, papers, projects, laboratory/clinical exercises and examinations, presentations, simulations, portfolios, homework assignments, and instructor observations.

Cognitive Each student will be expected to Identify/Recognize...

• SQL programs and applications
• why databases are important
• different types of databases
• steps involved in the design of databases
• concepts/steps involved in the implementation of database
• concepts guiding the practical administration of database
• data warehouses and their uses
• the impact of the Internet on Database design/usage
Performance  Each student will be expected to *Demonstrate/Practice*...

- their ability to use SQL to generate single and multi-table queries, update data and generate reports on a sample database
- their ability to design a relational database including records, tables and files
- their ability to understand and generate Entity Relationship Diagrams and other database design tools
- their understanding of verification and validation
- their understanding of data warehouse
- the twelve rules that define a data warehouse
- typical uses of internet databases

Attitudinal  Each student will be expected to *Believe/Feel/Think*

- Fully understand the importance and use of database in today’s information oriented society

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