

**Course Title: IST 173 Database Fundamentals**

**Course Instructor(s): Margaret Spivey**

**Programs: Information Systems Technology – Developer, Networking Technology, Web and Multimedia Technology**

**Expected Learning Outcomes**

1. Analyze and explain the behavior of database fundamental concepts.
2. Implement a database through the knowledge of fundamental database concepts: primary keys, normalization, entities, attributes, relationships.
3. Create and manipulate tables for a database through the use of SQL commands.
4. Apply the techniques of SQL to retrieve data from a database.
5. Modify data in a database through the use of SQL commands.
6. Using database administration principles manage a database.
7. Use functions and stored procedures in a SQL environment to manipulate data in a database.

**Assessment** (How do students demonstrate achievement of these outcomes?)

1. Successful manipulation of a database.
2. Satisfactory scores on exams and programs.
3. The Computer-Based-Portfolio reflects the student's acquisition of skills and learning throughout their college career. The portfolio contains a multitude of examples (i.e. communication samples, presentations, software, digitized work, videotapes of performance, input by faculty and staff, and letters of recommendation) that can be used by the student, the college and future employers as evidence of these skills.

**Validation** (What methods are used to validate your assessment?)

1. Approval of Information Systems Technology Advisory Committee
2. Faculty Review

**Results** (What do the data show?)

**Follow-up** (How have you used the data to improve student learning?)

**Budget Justification**

(What resources are necessary to improve student learning?)

Students use the SQL feature in from XAMPP.com to complete assignments for the class.