

McLennan
Community
College



WACO, TEXAS

INTRODUCTION TO DATABASE PROGRAMMING
ITSE 2309
COURSE SYLLABUS

REVISED: 09-10

INTRODUCTION TO DATABASE PROGRAMMING

ITSE 2309

Course Description:

Covers application development using database programming techniques emphasizing database structures, modeling, and database access. Students develop database applications using a structured query language; create queries and reports from database tables; and create appropriate documentation. Semester Hours 3 (2 lec/2 lab)

Prerequisites and/or Corequisites:

Prerequisite: COSC 1336

Required Text & Material:

- A. SQL Server 2005 by Mike Murach
- B. 1 - 1GB USB Flash Drive

Course Objectives and/or Competencies:

- A. Course Objectives: Application development using database programming techniques emphasizing database structures, modeling, and database access. The major topic will be: SQL for SQL Server (a data manipulation language)
- B. Course Competencies: Upon specific completion of ITSE 2309 Database Programming, the student will be able to demonstrate knowledge of relational database theory; use advanced capabilities for online collection and distribution of data; and analyze data using Database Programming features.

Specific Competencies: Upon successful completion of the course, the student will be able to:

1. Define a list of terms and concepts as they relate to the relational database structures and structured query language (SQL).
2. Design and create databases using MS Access 2000. Define data validation rules and data validation text using SQL. Add, delete, display, and edit records in database tables.
3. Use SQL to build queries, search tools, and selection criteria to locate specific information in databases.
4. Write queries using unions and joins
5. Write queries using aggregate functions

6. Write queries to create, alter tables and or databases
7. Code sub queries
8. Design databases

C. Evaluation

1. Written objective and/or subjective exams
2. Practical laboratory exams.
3. One major projects in designing, creating and documenting a database in support of a business requirement using SQL/400.
4. Class discussion and participation including teamwork.
5. Homework and class assignments
6. Attitude and work habits

MCC Attendance Policy:

Regular and punctual attendance is expected of all students, and each instructor will maintain a complete record of attendance for the entire length of each course, including online and hybrid courses. Students will be counted absent from class meetings missed, beginning with the first official day of classes. Students, whether present or absent, are responsible for all material presented or assigned for a course and will be held accountable for such materials in the determination of course grades. In the case of online and hybrid courses, attendance will be determined in terms of participation, as described in the course syllabus.

Absence from 25 percent of scheduled lecture and/or laboratory meetings will be taken as evidence that a student does not intend to complete the course, and the student will be withdrawn from the course with a grade of W. The instructor may reinstate the student if satisfied that the student will resume regular attendance and will complete the course. If the student's 25 percent absences are reached after the official drop date, the instructor may assign a W, if the student is passing and requests to be withdrawn. However, if a student who is not passing reaches the 25 percent point after the official drop date, the student will receive an F. In extenuating circumstances, the instructor may assign a W to a student who is not passing.

Each absence will count toward attendance requirements in each course.

Students will be permitted to make up class work and assignments missed due to absences caused by (1) authorized participation in official College functions, (2) personal illness, (3) an illness or a death in the immediate family, or (4) the observance of a religious holy day. Also, the instructor has the prerogative of determining whether a student may make up work missed due to absences for other reasons. It is the student's responsibility to inform the instructor of the reason for an absence and to do so in a timely fashion.

Student Absences on Religious Holy Days

McLennan Community College shall excuse a student from attending classes or other required activities including examinations for the observance of a religious holy day, including travel for that purpose. Students are required to file a written request with each instructor for an excused absence. A student whose absence is excused for this observance may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence. Religious holy day means a holy day observed by a religion whose places of worship are exempt from property taxation under the Texas Tax Code. McLennan Community College may not excuse absences for religious holy days which may interfere with patient care.

Note: Students interested in seeing the class attendance policy in its entirety should check the Highlander Guide or the MCC policy manual.

ADA Statement:

In accordance with the requirements of the Americans with Disabilities Act (ADA), and the regulations published by the United States Department of Justice 28 C.F.R. 35.107(a), MCC's designated ADA co-coordinators, Mr. Gene Gooch - Vice President, Finance and Administration and Dr. Santos Martinez – Vice President, Student Services shall be responsible for coordinating the College's efforts to comply with and carry out its responsibilities under ADA. Students with disabilities requiring physical, classroom, or testing accommodations should contact Mr. Marcus Sweatt, Disabilities Specialist, at 299-8122 or msweatt@mclennan.edu.

COSC1336 - PROGRAMMING FUNDAMENTALS 1

Course Competencies	Workplace Competencies															Foundation Skills																										
	Resources				Interpersonal					Information				Systems			Technology			Basic Skills					Thinking Skills					Personal Qualities												
	A	B	C	D	A	B	C	D	E	F	A	B	C	D	A	B	C	A	B	C	A	B	C	D	E	A	B	C	D	E	F	A	B	C	D	E						
Define a list of terms and concepts as they relate to the relational database structures and structured query language (SQL).											X						X			X												X										
Design and create databases using MS Access 2000. Define data validation rules and data validation text using SQL. Add, delete, display, and edit records in database tables.											X						X			X												X	X									
Use SQL to build queries, search tools, and selection criteria to locate specific information in databases.	X					X					X						X			X												X	X									
Write queries using unions, joins, and aggregate functions	X					X					X					X	X	X						X									X	X								
Write queries to create, alter tables and or databases	X					X	X				X					X								X									X									
Deign databases	X					X	X	X			X	X				X								X									X									

