



Purpose: It is the intention of this Administrative-Master Syllabus to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by the faculty of Wharton County Junior College, regardless of who teaches the course, the timeframe by which it is instructed, or the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in the improvement of instruction.

Course Title – Database Programming
Course Prefix and Number – ITSE 2309
Department - Computer Science

Division - Tech & Bus

Course Type: (check one)

- Academic General Education Course (from ACGM – but not in WCJC Core)
 Academic WCJC Core Course
 WECM course (This course is a Special Topics or Unique Needs Course: Y or N)

Semester Credit Hours # : Lecture hours# : Lab/other hours # 3:2:2

Equated Pay hours for course - 3

Course Catalog Description – Database development using database programming techniques emphasizing database structures, modeling, and database access. Uses Structured Query Language (SQL) in a Relational Database Management System (RDBMS) to create tables, views, sequences, and constraints.

Prerequisites/Corequisites - None

List Lab/ Other Hours
Lab Hours 2
Clinical Hours
Practicum Hours
Other (list)

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Stephanie Dees	Signature 	Date 11/25/2009
Department Head Stephanie Dees	Signature 	Date 11/25/2009
Division Chair Stephanie Dees	Signature 	Date 11/25/2009
Vice President of Instruction or Dean of Vocational Instruction	Signature 	Date 12-1-09



I. Topical Outline – Each offering of this course must include the following topics (be sure to include information regarding lab, practicum, clinical or other non lecture instruction):

Define: SQL and relational database
Define: table, row, cell, column, primary key
Select statements
Select clauses
Where clauses
Equal condition
Less than condition
In, between, like, null, not null conditions
Order by clause
Compound conditions in where clause
Creating: tables and views
Difference/similarities between tables and views
Deleting tables and views
Adding/deleting rows and columns
Commit and rollback
Insert, update and delete constraints
Transactions
Column formats
Use of the data dictionary
Primary and foreign keys – creating and use
Duplicate row issues
Data formats
Sequences
Indexes
Referential integrity
Inserts, updates and deletes using referential integrity
Check, unique, not null and primary key constraints
Inner joins

II. Course Learning Outcomes

This course incorporates the National Workforce Center for Emerging Technologies Programming/Software Engineering skill standards recognized by the Texas Skill Standards Board.

Critical Work Function Key Activities assessed in this course:

C3 Develop appropriate data model and database scheme

III. Required Text(s), Optional Text(s) and/or Materials to be Supplied by Student.

- Oracle 11g: SQL, 2nd Edition; Joan Casteel; Course Technology; ISBN 9781439041284
- Oracle 10g Developer: PL/SQL programming; Joan Casteel; Course Technology; ISBN 978-1-4239-0136-5

IV. Suggested Course Maximum - 20

V. List any specific spatial or physical requirements beyond a typical classroom required to teach the course.

One PC per student with Oracle database installed.

VI. Course Requirements/Grading System – Describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course

Test and Comprehensive Final Exam (with hands-on component) weekly Short Answer and Hands-on Lab Assignments and individual project

40% Labs

10% Project

50% Tests and Final Exam

VII. Curriculum Checklist

- **Academic General Education Course** (from ACGM – but not in WCJC Core)
No additional documentation needed

- **Academic WCJC Core Course**
Attach the Core Curriculum Checklist, including the following:

- Basic Intellectual Competencies
- Perspectives
- Exemplary Educational Objectives

- **WECM Courses**
If needed, revise the Program SCANS Matrix & Competencies Checklist.