

El Paso Community College

Syllabus

Part II

Official Course Description

SUBJECT AREA	<u>Information Technology Systems</u>
COURSE RUBRIC AND NUMBER	<u>ITSE 2309</u>
COURSE TITLE	<u>Database Programming</u>
COURSE CREDIT HOURS	<u>3 3 : 1</u> Credits Lec Lab

I. Catalog Description

Develops applications using database programming techniques emphasizing database structures, modeling, and database access. “This is a Microsoft Office Specialist Certification course that prepares you to take a test to qualify you as a core user.” **Prerequisite: ITSC 1301. (3:1).**

II. Course Objectives

Upon satisfactory completion of this course, the student will be able to:

- A. Introduction to Windows and Database Systems
 1. Use essential Windows skills and perform effective file management in Windows.
 2. Understand introductory database concepts:
 - a. Describe database management features and correctly use database terminology
 - b. Identify components of Access windows, launch and exit Access.
 - c. Open and close Access databases.
 3. Create and utilize Access tables:
 - a. Design and create Access tables to include data types and properties.
 - b. Add, change and delete table records.
 4. Create queries to extract table information:
 - a. Define relationships between tables.
 - b. Create queries to extract data.
 - c. Use calculated controls and multiple criteria queries
- B. Intermediate Database Concepts
 1. Create forms to view records:
 - a. Create, save, and open forms in Access
 - b. Find, sort, view, and maintain data using forms.
 - c. Use form filters to select and sort records.
 - d. Create advanced forms (form with a sub form) with calculated controls
 2. Create reports:
 - a. Create, save, and open reports in Access.
 - b. Modify report controls and properties.

- c. Modify sections of a report and understand impact on display.
 - d. Integrate Access with other programs
3. Create advanced Queries:
- a. Create lookup fields.
 - b. Create queries using pattern matching and list-of-values
 - c. Create parameter queries

C. Advanced Database Techniques:

- 1. Use Query wizards for crosstab, find duplicates, and find unmatched queries.
- 2. Create action queries – make-table, append, delete and update queries.
- 3. Create a graphical user interface (switchboards) for users using the Switchboard manager.
- 4. Create macros for use in forms and switchboards.

III. THECB Learning Outcomes (WECM)

- 1. Develop database applications using a structured query language.
- 2. Create queries and reports from database tables.
- 3. Implement data integrity.
- 4. Optimize query performance.
- 5. Create and maintain indexes.
- 6. Create appropriate documentation.

IV. Evaluation

A. Pre-assessment

Students must have taken and completed ITSC 1301 (CISC 3101) “Introduction to Computers and Applications” prior to taking this course.

B. Post-assessment

This course will contain lab assignments and exams. The instructor will determine the mix of lab assignments and exams to arrive at a grade as described in the Instructor Requirements document.

C. Remediation

The instructor may provide the students with means of improving a grade. The instructor will determine the timing, form, and method of remediation.

V. Disability Statement (Americans with Disabilities Act [ADA])

EPCC offers a variety of services to persons with documented sensory, mental, physical, or temporary disabling conditions to promote success in classes. If you have a disability and believe you may need services, you are encouraged to contact the Center for Students with Disabilities to discuss your needs with a counselor. All discussions and documentation are kept confidential. Offices located: VV Rm C-112 (831-2426); TM Rm 1400 (831-5808); RG Rm B-201 (831-4198); NWC Rm M-54 (831-8815); and MDP Rm A-125 (831-7024).

VI. 6 Drop Rule

Students who began attending Texas public institutions of higher education for the first time during the Fall 2007 semester or later are subject to a 6-Drop limit for all undergraduate classes. Developmental, ESL, Dual Credit and Early College High School classes are exempt from this rule. All students should consult with their instructor before dropping a class. Academic assistance is available. Students are encouraged to see Counseling Services if dropping because exemptions may apply. Refer to the EPCC catalog and website for additional information.