

# El Paso Community College

## Syllabus

### Part II

## Official Course Description

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| <b>SUBJECT AREA</b>             | <u>Information Technology Systems</u>                                    |
| <b>COURSE RUBRIC AND NUMBER</b> | <u>ITSE 1345</u>   |
| <b>COURSE TITLE</b>             | <u>Introduction to Oracle SQL</u>  |
| <b>COURSE HOURS</b>             | <u>3            3            :    1</u><br>Credits      Lecture      Lab |

### I. Catalog Description

Introduces the design and creation of relational databases using Oracle. Includes topics on storing, retrieving, updating, and displaying data using Structured Query Language (SQL). (3:1).

### II. Course Objectives

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

- A. Recognize computer terminology and perform basic computer skills (e.g., using peripherals, creating and maintaining files, using the Internet, utilizing software packages, etc).
- B. Describe database concepts to include data normalization.
- C. Identify and outline the major tasks and steps of database design.
- D. Describe the basic architecture and components of the Oracle system.
- E. Analyze business needs and utilize SQL (Structured Query Language) to create scripts for querying and manipulating data.
- F. Utilize tools such as SQL\*PLUS and SQL Developer in an Oracle environment.
- G. Develop queries and SQL scripts using basic record retrieval commands.
- H. Create, modify, and drop database tables using Data Definition Language.
- I. Use Data Manipulation Language to insert, update, and delete records.
- J. Create Views and other Database Objects.
- K. Retrieve and manipulate data using advanced query features such as joins, nested queries, set operators, and functions.
- L. Describe the fundamentals of PL/SQL programming language.
- M. Write and execute PL/SQL programs using variables, functions, decision control structures, loops, and cursors.
- N. Demonstrate how to troubleshoot and manage errors using debugging tools and exception handling code.
- O. Identify customer need to design and develop reports.
- P. Apply research, analysis, documentation, communication, security, team work, and other programming skills and concepts.
- Q. Explore advanced database topics such as using JDeveloper software.

### **III. THECB Learning Outcomes (WECM)**

1. Write Structured Query Language (SQL) statements using Oracle.
2. Select and sort data.
3. Produce reports with SQL\*Plus.
4. Create and manage tables which include constraints.
5. Create Views and other database objects.

### **IV. Evaluation**

#### **A. Preassessment**

None

#### **B. Postassessment**

1. There will be three (3) written examinations. The final exam will be comprehensive.
2. Homework assignments will be assigned at the instructor's discretion and will be averaged on a 100-point scale.
3. Lab assignments will be assigned throughout the semester and will be averaged on a 100-point scale.

#### **C. Remediation**

The instructor may provide the students with a 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.