El Paso Community College Syllabus Part II Official Course Description

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

I. Catalog Description

An introduction to the design and creation of relational databases using Oracle. Topics include 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 Structured Query Language (SQL) to create scripts for querying and manipulating data.
- F. Utilize tools such as SOL*PLUS and SOL 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 apply troubleshoot resolutions and manage errors using debugging tools and the 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.
- R. Develop code and practice programming code style conventions.
- S. Apply configuration management tools and processes.
- T. Analyze and document steps for solving task and adhere to information protection policy.

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.

VII. Title IX and Sex Discrimination

Title 9 (20 U.S.C. 1681 & 34 C.F.R. Part 106) states the following "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any educational program or activity receiving Federal financial assistance." The Violence Against Women Act (VAWA) prohibits stalking, date violence, sexual violence, and domestic violence for all students, employees and visitors (male and female). If you have any concerns related to discrimination, harassment, or assault (of any type) you can contact the Assistant to the Vice President for Student and Enrollment Services at 915-831-2655. Employees can call the Manager of Employee Relations at 915-831-6458. Reports of sexual assault/violence may also be reported to EPCC Police at 915-831-2200.