COURSE DESCRIPTION

Prerequisites: ITSE 1445 or instructor approval.

A continuation of Oracle SQL. Topics include hierarchical queries, set-based queries, correlated subqueries, scripting, and scripting generation. This course may be repeated if topics and learning outcomes vary.

This is a 4 credit hour course. (3 lec., 3 lab.)

WECM END-OF-COURSE OUTCOMES: Retrieve data including SET operators, correlated subqueries, and hierarchical queries; write SQL scripts that execute remote procedure calls; create a package to group together variables, cursors, exceptions, procedures, and functions; and invoke a package constraint.

STUDENT LEARNING OUTCOMES:

Upon successful completion of ITSE 2454, students will be able to:

- Identify and the use of higher-level PL/SQL program block structures, procedures, functions, triggers, dependencies and packages.
- Produce database tables using hierarchical, set based and correlated queries, write scripts that execute remote procedure calls, identify data, cursor and exception handling and PL/SQL packages.
- Reinforce skills by retrieving data with SET operators, building error trapping facilities within programs, embedding SQL, loading data into Oracle tables from external files using the SQL*Loader utility and employing dynamic SQL and object technology based on assignment criteria.
- Demonstrate advanced knowledge of PL/SQL needed to pass the Introduction to Oracle: SQL and PL/SQL or Oracle Database SQL Expert certification exams by developing and writing documented programs using PL/SQL statements, procedures and creating packages to group together variables, cursors, exceptions, procedures, functions and invoking a package constraint.

COURSE MATERIALS


Email Address: (i.e. Ecc Webmail, Yahoo, Hotmail, gmail, etc.)
A student of this institution (El Centro College) is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

This is an online class.
All course work will be posted on eCampus. It is your responsibility to get the course notes, handouts, and laboratory assignments from eCampus. Your instructor will respond to all emails within 24 hours.

Major Course Requirements

Students will participate in Discussions addressing topics in each chapter
Students will complete Chapter Quizzes
Students will complete lab assignments and a Case Study which include the following:
  - Write PL/SQL syntax for assignments using PL/SQL block structures, queries and sub-queries, keywords, constraints, search conditions, database triggers, dependencies, joined data, single-row and multiple-row functions and create views
  - Manipulate database tasks & use error trapping with PL/SQL programs
  - Apply PL/SQL tools and procedures to debug and analyze code
  - Work with Oracle-supplied packages and utilities
Students will prepare for the Programming with PL/SQL Certification exam

Midterm, a Final Exam and completion of a Case Study will evaluate the student’s understanding of Oracle PL/SQL concepts and knowledge presented in each chapter

Subject Matter

Topics covered in the lecture portion of the course include:

  - Introduction to PL/SQL
  - Basic PL/SQL Block Structures
  - Handling Data in PL/SQL Blocks
  - Cursors & Exception Handling
  - Procedures
  - Functions
  - PL/SQL Packages
  - Program Unit Dependencies
  - Database Triggers
  - Oracle-Supplied Packages & SQL*Loader
  - Introduction to Dynamic SQL & Object Technology
Disclaimer
The provisions contained in this syllabus do not constitute a contract between the student and El Centro College. These provisions may be changed at the discretion of the Coordinator/Instructor. When necessary, appropriate notice of such changes will be given to the student.

The instructor-of-record may provide additional information to enhance the course to meet the needs of the enrolled students, provided that the enhancements do not conflict with the official course syllabus.

Policies
Students should click on the links below and read all of these policies.

General institutional policies
Course-related institutional policies