

**ORC 2505 PL/SQL**  
**Oracle 11g/10g Programming with PL/SQL: Lecture/ Lab**

**Catalog Description**

This lecture/lab course gives students hand-on experience in developing and programming database objects and structures. The students will learn how to store, insert, retrieve, update, manipulate data, and display data in a relational database using procedural language SQL with Oracle 11g/10g, the internet-oriented object-relational database. The students will learn SQL\*Plus command to communicate with Oracle database more efficiently. The students will learn to create PL/SQL blocks of application code that can be shared by multiple Forms, Reports, and data Management applications. Student will learn to write store procedures and functions, exception handling, cursors, and to create packages (PL/SQL libraries) and triggers. Finally, students will learn how to call Java programs from the database, publish HTML pages using PL/SQL Web Toolkit and PL/SQL Server Pages.

Some experience with at least one high-level language.

**Learning Objectives:**

Having successfully completed this course, the students will be able to:

- Utilize SQL, PL/SQL, and SQL\*PLUS
- Employ SQL\*PLUS commands for Editing, Formatting, File-related, and Variable-related purposes
- Restrict and sort data
- Utilize built-in SQL functions
- Work with multiple tables
- Create and Modify tables and constraints
- Create and user other database objects
- Build a PL/SQL block
- Construct PL/SQL structures
- Process cursors in PL/SQL
- Handle runtime exceptions
- Work with collections of data
- Develop procedures and functions
- Develop Oracle packages
- Create Oracle triggers