El Centro College
ITSE 2456
ORACLE DATABASE ADMINISTRATION I
Syllabus

COURSE DESCRIPTION

Prerequisites: Previous Oracle skills or instructor approval.

Fundamentals of the tasks and functions required of a database administrator using Oracle. This course may be repeated if topics and learning outcomes vary.

This is the second course leading to preparation for the Oracle 11g Certification. This is the first class, in Database Administration and the last class before taking the Oracle Certified Associate Exam (OCA). The OCA exam is required before taking the Oracle Certified Professional exam (OCP). The class will prepare the student to create the initial database and configure the storage space, tables, users, and security for a database.

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

WECM END-OF-COURSE OUTCOMES: Create an operational database using Oracle; will demonstrate the ability to create, delete, and modify associated files, tablespaces, segments, extents, and blocks; start up and shut down an Oracle instance and database; add, delete, and modify users, privileges, and resources; and demonstrate use of National Language and Support (NLS) features.

STUDENT LEARNING OUTCOMES:

Upon successful completion of ITSE 2456, students will be able to:

- **Identify** Oracle architecture, tools, tasks and functions used by a database administrator.
- **Produce** operational databases using Oracle with table spaces, segments, extents, blocks and instances, while using National Language and Support (NLS) features.
- **Reinforce** skills by creating, deleting, modifying and querying the database, as well as utilizing privileges and resources based on assignment criteria.
- **Demonstrate** knowledge of database administration needed to pass the Oracle Database Administration I certification exam by creating databases using Oracle, applying tables, data and security and proactive management while monitoring performance.
COURSE MATERIALS


Email address (i.e. ECC Webmail, Yahoo, Hotmail, 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 which include:
  • Utilizing tools for administering an Oracle database
  • Managing various stages of database Startup & Shutdown
  • Creating, managing and maintaining table spaces, user accounts, schema object and data
  • Implementing database security
  • Performing Backup & Recovery
Students will prepare for the Oracle Database Administration I Certification Exam

Midterm and a Self-Test Software Final Exam will evaluate the student’s understanding of Oracle Database Administration I concepts and knowledge presented in each chapter.

Subject Matter

Topics covered in the lecture portion of the course include:

  • Introduction to the Oracle Server Technologies
  • Exploring the Database Architecture
  • Preparing the Database Environment
  • Creating an Oracle Database
  • Managing the Oracle Instance
Configuring the Oracle Network Environment
Managing Database Storage Structures
Administering User Security
Managing Schema Objects, Data and Concurrency and Undo Data
Implementing Oracle Database Security
Database Maintenance
Performance Management
Backup & Recovery Concepts
Performing Database Recovery
Moving Data
Intelligent Infrastructure Enhancements

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