Common Course Outline
CSIT 156
Introduction to SQL Using Oracle
4 Semester Hours

The Community College of Baltimore County

Description

CSIT 156 – 4 Credits – Introduction to SQL Using Oracle provides an introduction to the Oracle relational database, structured query language and database concepts. Students will create tables, establish relationships, enforce integrity constraints and manipulate data. Additional database objects, database security, transaction control, and user creation and management will also be introduced.

4 credits: 4 lecture hours per week
Prerequisite: CSIT 101 or consent of the Program Director

Overall Course Objectives

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

1. explain oracle database concepts and terminology;
2. utilize Oracle client software;
3. analyze database structure;
4. execute and modify SQL (Structured Query Language) select statements;
5. upload and execute SQL scripts;
6. define database object types;
7. create and modify tables;
8. create and use sequences;
9. create and use indexes;
10. implement and modify constraints;
11. create views;
12. develop effective security policies;
13. create and manage users;
14. analyze performance handling;
15. develop subqueries;
16. query the data dictionary;
17. manipulate data using single-row and group functions;
18. collaborate with group members; and
19. assess database vulnerabilities.

Major Topics

I. Introduction to Oracle
II. Oracle client software
III. Oracle queries
IV. Subqueries
V. Data analysis
VI. Data manipulation
VII. Creating sequences
VIII. Creating views
IX. Creating indexes
X. Database security
XI. Performance handling
XII. Collaboration skills for database implementation

Course Requirements

Grading: Grading procedures will be determined by the individual faculty member and will be provided the first week of class.

The following will be required for this course:
1. Minimum of 8 lab projects
2. Minimum of 2 tests
3. Comprehensive final exam

Other Course Information

A grade of C or better in this course is needed in order to register for CINS 254.
This course is taught in a computerized lab environment.

Date revised 3/29/2011