

ADDIS ABABA UNIVERSITY
ADDIS ABABA INSTITUTE OF TECHNOLOGY
CENTER OF INFORMATION TECHNOLOGY AND SCIENTIFIC COMPUTING

Course Name: DB Administration and Security

Academic Year: 2016

Course Code:

Target Group: G4IT

Credit Hours: 2, 1, 4

Instructor: Nebiat F. /

Credit Hour: 4

Course Description:

This course addresses how to manage a database server in a client/server environment. Topics include creating the database environment, database connectivity, security, backup and recovery, and performance monitoring and tuning.

Objectives of the course:

This course enables the students to:

- ✓ Show an understanding of the various aspects of database administration.
- ✓ Develop the hands on experience on database administration tasks.
- ✓ Apply the concepts and techniques of database administration to the real world problems.

Topics to be covered:

- ✓ What is a DBA
- ✓ Creating the Database Environment
- ✓ Database Design
- ✓ Application Design
- ✓ Performance Management
- ✓ System Performance
- ✓ Database Performance
- ✓ Data Integrity
- ✓ Database Security
- ✓ Database Backup and Recovery
- ✓ Database Connectivity

Assessment Process

Assignments =20-25%

Projects= 20%

Mid Exam=20-25%

Final Exam=40%

Laboratory Practices

Oracle database architecture; DBMS installation and configuration issues; performance optimizing, monitoring and tuning; user management and database security, back-up and recovery; multi-platform DBA issues; and DBA tools.

Teaching/ Learning Methodology

Lecture, demonstration, tutorial, Project / Assignment, case study
the course site [www.10.5.56.5/Nebiat/Database Administration](http://www.10.5.56.5/Nebiat/Database%20Administration)

References

DATABASE ADMINISTRATION: The Complete Guide to DBA Practices and Procedures, CRAIG S. MULLINS.

Database Systems: A Practical Approach to Design, Implementation, and Management, Thomas M. Connolly and Carolyn E. Begg.

Oracle Database 11g: Administration Workshop I, Oracle Press