Autumn-2010
IT612 - Database Design and Programming

Credit Structure: 3-0-4-5

Instructor: PM Jat
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Course Description-

This course teaches database concepts, design and programming database systems. It includes Conceptual Data Modeling, Relational Model, Functional Dependencies, and Normalization. The course also introduces Physical Database Design, Query Execution and Transaction Processing concept.

Programming topics include SQL, Stored Procedures, Embedded SQL-Pro*C/SQLJ, and Application Programming Interfaces like JDBC/ODBC.

During Lab hours, students would be asked to model and design database for a series of mid-size real life scenarios. Exercises would also require writing queries, stored procedures, and use of one of database access API.

Tentative Evaluation Strategy:

Two In-Sem Exams: 30%
Practical Assessment: 30%
End-Sem Exam: 40%

Texts/Reference:

1. Database Management Systems, 3rd ed,
   Raghu Ramakrishnan and Johannes Gehrke, McGrawHill

   Ramez Elmasri and Shamkant B. Navathe, Pearson Education