METU Department of Computer Engineering

CENG 302

Introduction To Database Management Systems

Fall 2014-2015

Instructor: Pınar Karagöz

Teaching Assistant: Murat Öztürk

Lecture Hours: Wednesday 9.40 – 12.30 IE-306

Textbook:

- R. Elmasri, S.B. Navathe, Fundamentals of Database Systems, 4th edition, Addison-Wesley, 2004

References:

- Raghu Ramakrishnan, Database Management Systems, McGraw Hill, 3rd edition, 2003

- A. Silberschatz, H.F. Korth, S. Sudarshan, Database System Concepts, McGraw Hill, 4th edition, 2002

Course Objective: The objectives of this course are to enable students to understand the basics of database management systems, and to apply this basic knowledge on current relational dbms's.

Course Outcomes: At the end of this course, students are expected to have basic and general information on database management systems, to be able to create a database and develop queries on top of it. In addition, they will learn the basics of the index structures and they will be able to evaluate and select the most appropriate index structures for an application.

Grading:

Homeworks   25%

Midterm   35%

Final   40%

Topics:

- Introduction to Relational Database Management Systems

- Entity-Relationship (ER) Model

- The Relational Data Model

- Relational Algebra & Calculus

- SQL

- File Organization and Indexing

- Relational Database Design: Normalization

Weekly Schedule:

Week	Date	Topic
1	24.09.2014	Introduction
2	01.10.2014	ER Model
3	08.10.2014	ER Model, Relational Model
4	15.10.2014	ER-to-Relational Mapping
5	22.10.2014	Relational Algebra
6	29.10.2014	***Cumhuriyet Bayramı***
7	05.11.2014	Relational Algebra, Relational Calculus
8	12.11.2014	SQL
9	19.11.2014	**Midterm**
10	26.11.2014	SQL
11	03.12.2014	SQL, File Organization, Indexing
12	10.12.2014	File Organization, Indexing
13	17.12.2014	Normalization
14	24.12.2014	Normalization
15	31.12.2014	Review
	05-17.01.2015	**Final Exams**

Notes:
- All assignments should be done individually, unless otherwise announced.
- You can get makeup exam if you provide a legal excuse document to the instructor before the exam.
- To be able to take the final exam, you should have at least 60% attendance.