KINGDOM OF SAUDI ARABIA

THE NATIONAL COMMISSION FOR ACADEMIC ACCREDITATION & ASSESSMENT

COURSE SPECIFICATION
HASEB 124

Revised March 2007

Course Specification

Almajmaah University

College : Al Majmaah Community College

Department : Natural and Applied Sciences

A. Course Identification and General Information

1. Course title and code: Principles of Database Systems - HASEB 124

2. Credit hours: 3 Hours

3. Program in which the course is offered: Computer science (Career Program)

4. Name of faculty member responsible for the course :

   Mr. Naif Alshammari

5. Level at which this course is offered : Second level

6. Pre-requisites for this course:

HASR 110 - Principles of Computer and Information Technology

7. Co-requisites for this course (if any) : None

8. Location: Main campus   Room No: 2..A1

B - Objectives

Upon successful completion of this course, students should be able to:

1. Understand the basic concepts of databases
2. Understand the databases design process using Entity-Relationship Diagrams or starting from the relations of functional dependency.
3. Write queries using SQL language in order to create or manipulate a relational database.

C. Course Description

1. Topics to be Covered		
Contents	Nb of Weeks	Contact hours
Relational Databases Environment	2	6
Entity-Relationship Diagrams	6	18
Normal Forms	2	6
Relational Algebra	2	6
SQL	3	9

2. Course components (Total contact hours per semester):			
Lecture	Tutorial	Exercises	Other
45 hrs	30 hrs	15 hrs	

3. Additional learning hours expected for students per week

The student must work at least for 3 hours per week which is equivalent to 45 hours per semester.

4. Development of learning outcomes in the domains or areas of learning

a. Knowledge

(i) knowledge to be acquired :

- Knowing the basic concepts and the architecture of a relational database

- Knowing the design process of databases using the E/R Diagrams

- Design a relational database starting from the relations of functional dependency

- Knowing the basic commands of SQL.

(ii) Teaching strategies to be used to develop that knowledge :

- Lectures

- Exercises

- Case studies.

(iii) Methods of assessment of knowledge acquired :

- Exams

- Home works

b. Cognitive Skills

(i) Cognitive skills to be developed :

- **Ability of analysis**

- **Ability of deduction**

- **Decision making.**

(ii) Teaching strategies to be used to develop these cognitive skills :

- **Exercises**

- **Case studies.**

(iii) Methods of assessment of students cognitive skills

- **Exams**

- **Home works**

5. Schedule of Assessment Tasks for Students During the Semester			
Assessment	**Assessment task**	**Week due**	**Proportion of**

			Final Assessment
1	Attendance, Participation and Home works	Each week	10
2	First month exam	6th week	20
3	Second month exam	10th week	20
4	Research	12th week	10
5	Final exam	According to the exams schedule	40

D. Student Support

1. Arrangements for availability of faculty for individual student consultations and academic advice

- Office hours : 6 hours a week

- Academic guidance : 2 hours a week**.**

D a y	8-9	9-10	10-11	11-12		1-2	2-3	3-4
Sunday		Academic Guidance				Office Hours		
Saturday								
Monday		Academic Guidance	Office Hours					
Tuesday								
Wednesday	Office Hours							

E. Learning Resources

1. Required Textbooks

1. R. Elmasri & S.B. Navathe

Fundamentals of Database Systems, Addison Wesley, 5th Edition, 2006 (or latest)

2. A. Silbershatz, H. Korth,

Database System Concepts, 3rd Edition (or latest), 2001.

2. Recommended Book(s):

C. Date, Introduction Database Systems, Addison Wesley, 8th Edition, 2006 (or latest).

3. Electronic Materials, Web Sites, etc.

http://stanford.edu/class/cs145

http://www.w3schools.com/sql

http://faculty.ksu.edu.sa/zitouni

www.araboug.org

F. Facilities Required

A Lecture room appropriate for 30 students with a personal computer, a data show and a smart board.

G. Course Evaluation and Improvement Processes

1. Strategies for Obtaining Student Feedback on Effectiveness of Teaching:

- Periodical surveys on teacher website

- Students have to evaluate the teacher rendering before obtaining results through the university website *edugate.*

2. Processes for Improvement of Teaching :

- Periodical review of contents in the department to increase the effectiveness of the subject.

- Comparison of the course content with similar courses offered in others colleges

- Updating of the learning resources according to later developments in the domain of databases

- Using modern technologies in teaching and providing additional support to students.