University of the Philippines Open University
CMSC 206 - Database Management Systems
Course Guide

Introduction

Course Title: Database Management Systems (3 units)
Prerequisite: CMSC 204 or COI

Course Description:
Design and implementation of Database Management Systems

Course Objective:
This course aims to teach students the concepts of database management systems.

Faculty in Charge (FIC):
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Resources

All resources for the course will be uploaded/linked to on Moodle:

- Lecture notes

- Tools

- External references (books, videos, papers, ...)

Rules

No late submissions

No plagiarism tolerance

Schedule

Dates	Topic	Activities	Deadlines
Sept 5 - Sept 11	Introduction	Self introduction Mock Quiz	Sept 12
Fundamental Concepts of Databases and Data Modelling			
Sept 12 - Sept 18	Database and DBMS concepts	Quiz	Sept 19
Sept 19 - Sept 25	ER and Relational models	Quiz	Sept 26
Sept 26 - Oct 2	Normal Forms	Quiz Assignment 1	Oct 5 Oct 10
Oct 3 - Oct 9	Relational Algebra	Quiz	Oct 10
Relational Databases and DBMS in Practice			
Oct 10 - Oct 16	SQL	Quiz	Oct 17
Oct 17 - Oct 23	Triggers and stored procedures	Quiz Assignment 2	Oct 23 Oct 31
Oct 23 - Oct 30	Midterm week		Oct 31
Oct 31 - Nov 6	Query processing and optimisation	Quiz	Nov 7
Nov 7 - Nov 13	Storage and indexing	Quiz	Nov 14
Nov 14 - Nov 20	Recovery	Quiz	Nov 21
Different Database Concepts			
Nov 21 - Nov 27	MongoDB	Quiz Assignment 3	Nov 28 Dec 5
Nov 28 - Dec 4	Future trends in databases (NoSQL, BigData)	Quiz	Dec 5
Dec 5 - Dec 11	XML databases and Crowdsourcing		

Grading

Quizzes

We will cover 11 main topics in this module. Each topic will be the subject of a short quiz (10 questions maximum) that you will have to take through Moodle before the next week. These quizzes will assess your basic understanding of the topic.

Assignments

In addition to the quizzes you will have to complete three (3) assignments during the semester. You will have two (2) weeks to complete each assignment. These assignments will let you apply the concepts seen in the lecture.

Participation

The participation grade reflects your engagement with the material. There is no minimum weekly post count on the forum, or required interaction, but you are encouraged to ask questions, help others and share resources.

Grade distribution

Activity	Grade proportion
Weekly quiz	33% (3%each)
Assignments	60% (20% each)
Participation	7%
Total	100

Grading Scale

Range	Grade
90 - 100	1.00
90 - 94	1.25
85 - 89	1.5
80 - 84	1.75
75 - 79	2.00
70 - 74	2.25
65 - 69	2.50
60 - 64	2.75
55 - 59	3.00
0 - 54	5.00

Contact information

Please use Moodle forums as the preferred method of communication if you have questions. This way, not only I can answer your queries but also your classmates and my colleagues at UPOU. Furthermore, when using the forums, your classmates can also benefit from the answers you get to your questions.

If you have a query that needs a private answer, please use Moodle direct messages.

When contacting me, please keep in mind that I am not located in the Philippines and may keep different hours than you.