



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

## INTRODUCTION

Welcome to CMSC 206 – Database Management Systems. This course is a 3-unit course required in the Diploma of Computer Science of the UP Open University, but it can also be an elective course in the Master of Information Systems program. I am Ria Mae H. Borromeo, the faculty-in-charge for this course.

This course aims to teach students the concepts of database management systems. We will use the UPOU MyPortal (Moodle) as our primary learning environment and the book Database System Concepts 7<sup>th</sup> Edition by Silberschatz, Korth, and Sudarshan as our primary reference. This is not a free book, but lecture slides are provided.

## RESOURCES

[book]

1. **Database System Concepts 7<sup>th</sup> Edition** by Silberschatz, Korth, Sudarshan - <http://www.db-book.com/>

[tools]

1. **Execute SQL Online** - <https://db-book.com/university-lab-dir/sqljs.html>
2. **Relational Algebra Tutorial** - [http://www.tutorialspoint.com/dbms/relational\\_algebra.htm](http://www.tutorialspoint.com/dbms/relational_algebra.htm)
3. **SQLite Tutorial** - [http://www.tutorialspoint.com/sqlite/sqlite\\_tutorial.pdf](http://www.tutorialspoint.com/sqlite/sqlite_tutorial.pdf)

## TOPICS AND SCHEDULE

	Topic	Activity	Deadline
1	Introduction	Self-introduction, mock quiz	October 29
2	Database and DBMS Concepts	Quiz #1	
3	Entity-Relationship and Relational Models	Quiz #2	
4	Normal Forms	Quiz #3, Assignment #1	
5	Relational Algebra	Quiz #4	
6	SQL	Quiz #5	
7	Triggers and Stored Procedures	Quiz #6	December 17
		Assignment #2	
8	Query Processing and Optimization	Quiz #7	
9	Storage, Indexing, Recovery	Quiz #8	
10	Big Data and Data Analytics	Quiz #9	
11	NoSQL and MongoDB	Quiz #10, Assignment #3	
12	Trends in Database Systems	Assignment #4	

## QUIZZES

We will be discussing 12 major topics. There is a short online quiz for every topic to assess your understanding of the subject matter.

## ASSIGNMENTS

In addition to the quizzes, you must complete four (4) assignments. These assignments will let you apply the concepts discussed in this course.

## PARTICIPATION

Your participation and activity log in the online classroom will be monitored and graded.

## GRADING SYSTEM

- Quizzes 50%
- Assignments 45%
- Participation 5%

## GRADING SCALE

Range	Grade	Range	Grade
96-100	1.00	72-75	2.25
90-95	1.25	68-71	2.50
85-89	1.50	64-67	2.75
80-84	1.75	60-63	3.00
76-79	2.00	<60	5.00

## COMMUNICATION

If you have concerns, please post them in the online classroom to minimize information redundancy.

However, you can also email me at [rhborromeo@up.edu.ph](mailto:rhborromeo@up.edu.ph) if you have any urgent concerns. If I don't reply within 36 hours, please feel free to follow up. Please do not use MyPortal's messaging service. I am unlikely to respond there.