

University of Asia and the Pacific
Institute of Information Technology Studies
Course Syllabus

Course Code: ITB322
Course Title: DATABASE MANAGEMENT SYSTEM (Section 1: MTh, 1:00 - 3:00 PM, Section 2: MTh, 3:00 - 5:00 PM)
Prerequisite: ITB311
Academic Year: 2nd Semester, SY 2009 - 2010
Institute: Institute of Information Technology Studies
Instructor: Ms. Ria Mae G. Corda (riacorda@gmail.com)

References

Lecture

Elmasri, R. and Navathe, S . (2006). **Fundamentals of Database Systems, 5th ed.** Addison-Wesley.
 Connolly, T. and Begg, C . (2004). **Database Systems: A Practical Approach to Design, Implementation, and Management, 4th ed.** Addison-Wesley.

Laboratory

MySQL 5.4 Reference Manual. <http://dev.mysql.com/doc/refman/5.4/en/index.html> .
MySQL Tutorial. <http://www.tutorialspoint.com/mysql/index.htm>.
PHP MySQL Tutorial. <http://www.php-mysql-tutorial.com/wikis/mysql-tutorials/getting-started-with-mysql.aspx>.

Course Description

This course introduces you to the field of database management system. It covers the areas on database design, implementation and administration. Some topics include data analysis, data definition, normalization, entity-relationship diagram, and database design. The laboratory covers basic data manipulation and definition, views, stored procedures, triggers, and MySQL DB

Course Objectives

1. to introduce the field of database systems and database design
2. to study the relational model and relational languages namely relational algebra, relational calculus, and structured query language
3. to discuss the main techniques for database analysis and design and how they can be applied in a practical way
4. to examine selected database issues, current trends and emerging trends

Course Outline

Number of Weeks: 16
 Finals: March 22, 2010

Week	Lecture	Laboratory
1	Course Introduction	Installation of WAMP
2	ER Model Conceptual Design	SQL Data Manipulation
3	Relational Model/SQL DDL	SQL Data Manipulation
4	Relational Algebra and Calculus	SQL Data Definition
5	SQL DML	Views
6	Database Application Development	Stored Procedures
7	Database-Backed Internet Applications	Triggers
8	Overview of Storage and Indexing	Backup and Recovery
9	Overview of Query Evaluation	Access Control
10	Overview of Transaction Management	Authorization
11	Schema Refinement, FDs, Normalization	Logging and Recovery
12	Physical DB Design and Tuning	Replication
13	Security and Authorization	Query Optimization
14	Data Warehousing	Query Optimization
15	Decision Support	Query Optimization
16	Data Mining	Project Presentation

Course Requirements/Policies

1. Attendance will not be checked but quizzes are given every meeting.
2. No make-up quizzes/seatwork/assignments will be given. If the absence is excused, the quiz/seatwork/assignment will be dropped from the computation. Otherwise, a grade of zero (0) will be given.
3. Seven absences is equivalent to dropped and three tardiness to one absence.
4. Everyone must join and participate in the official wiki site: <http://itb322uap.wikidot.com>

Evaluation

Lecture			30%	96 - 100	1.0
	Quizzes	15%		93 - 95	1.25
	Seatwork/Assignments	15%		89 - 92	1.5
Laboratory			30%	84 - 88	1.75
	Quizzes	15%		79 - 83	2.0
	Exercises/Assignments	15%		74 - 78	2.25
Project			25%	69 - 73	2.5
Finals			15%	65 - 69	2.75
TOTAL			100%	60 - 64	3.0
				below 60	3.5