

## Course Syllabus

1. **Program of Study** Bachelor of Business Administration Program  
**Faculty/Institute/College** Mahidol University International College
2. **Course Code** ICIS 383  
**Course Title** Database Management Systems
3. **Number of Credits** 4 (**Lecture/Lab**) (3-2-7)
4. **Prerequisite(s)** ICMB 211, ICIS 210, ICIS 381
5. **Type of Course** Required Course
6. **Trimester / Academic Year** First, Second Trimester/2007-2008
7. **Course Conditions** 20-40 students
8. **Course Description**  
Logical organization of databases: the entity-relationship model. Relational database concepts, data design, modeling and normalization; the use of Structured Query Language to define, manipulate and test the database.
9. **Course Objective(s)**  
After successful completion of this course, students will be able to
  - 9.1 To understand the database design concept including: Conceptual, Logical and Physical Design.
  - 9.2 To create the database environment using Oracle software including database, SQL Plus, Forms and Reports.

### 10. Course Outline

Week	Course Outline				Instructor
	Topics	Lecture	Lab	Self-Study	
1	Introduction: What is database?	3	2	7	SPJ
2	Entity-Relationship Data Modeling: Tools and Techniques	3	2	7	SPJ
3	The Entity Relationship Model	3	2	7	SPJ
4	UML Style Class Diagrams	3	2	7	SPJ

5	The Relational Model and Normalization	3	2	7	SPJ
6	Midterm Examination	3	2	7	SPJ
7	Database Design	3	2	7	SPJ
8	Managing Multi-User Databases	3	2	7	SPJ
9	ODBC, OLE DB, ADO, and ASP, JDBC, Java Server Pages, and MySQL	3	2	7	SPJ
10	Object-Oriented Database	3	2	7	SPJ
11	Sharing Enterprise Data	3	2	7	SPJ
	<b>Total</b>	<b>33</b>	<b>22</b>	<b>77</b>	

### 11. Teaching Method(s)

Lecture, labs and demonstration

### 12. Teaching Media

Power Point Slide

Oracle Database and Tools

### 13. Measurement and Evaluation of Student Achievement

Students achievement is measured and evaluated by

13.1 The ability to understand the database design concept including:

Conceptual, Logical and Physical Design.

13.2 The ability to create the database environment using Oracle software including database, SQL Plus, Forms and Reports

Student's achievement will be graded according to the faculty and university standard using the symbols: A, B+, B, C+, C, D+, D, and F.

Student must have attended at least 80% of the total class hours of this course.

Ratio of mark

1. Midterm	25%
2. Final	30%
3. Project and assignment	30%
4. Quiz and Attendance	15%

### 14. Course Evaluation

14.1 Students' achievement as indicated in number 13 above.

14.2 Students' satisfaction towards teaching and learning of the course using questionnaires.

### 15. Reference(s)

Kroenke, D. Database **Processing Fundamentals, Design, and Implementation.**  
Date, C.J. **An Introduction to database Systems.**  
Elmasri R. and Shamkant B. Navathe. **Fundamentals of Database Systems.**  
Connolly T. and Carolyn Begg. **Database Systems a Practical Approach to  
design, Implementation, and management.**  
Silberschatz, Henry F.Korth, S.Sudarshan. **Database System Concepts, 4<sup>th</sup>  
Edition.**

**16. Instructor(s)**

Siriporn Jinanarong

**17. Course Coordinator**

Program Director of Information Systems Major