

**Database Systems**

<b>Bash Course Information</b>		<b>Subject Category:</b>	Compulsory IG
<b>Course Number</b>	0005112	<b>Credit Type and Number of Credits</b>	1
<b>Class Format</b>	Lecture	<b>Student Category</b>	Year 3
<b>Department</b>	Computer	<b>Classes per Week</b>	1
<b>Period of Study</b>	Semester 1		
<b>Required Materials</b>			
<b>Instructor</b>	Hideoaki Kobayashi-Hideki Saung Hninawint Oon		

**Course Objective**  
 The course provides students with the fundamental concepts of database systems. It covers data models (ER, relational), query languages (relational algebra, SQL), and implementation techniques of database management systems.

Evaluation/Unit	Ideal Level of Achievement (Very Good)	Standard Level of Achievement (Good)	Unacceptable Level of Achievement (Fail)
Relational algebra	Explain relational algebra operations	Understand relational algebra	Doesn't understand relational algebra
SQL	Embedded SQL, and understand simple applications. You can embed	SQL operations, functions, etc. Able to use calculations, logical operations, functions, etc.	SQL operations, functions, etc. can not use calculations, logical operations, functions, etc.

**Relationship with Learning Outcomes**  
 G15) As an engineer, attitude to act with awareness of social roles and responsibility to make a better society.  
 C11) Ability to operate and administer the computer software and hardware

**Please change**

**Teaching Method**  
 Learning through the assignments.  
 Lab work

**Course Plan**

Semester 1	Contents and Method of Course	Goals	Related MCG
8/May	Date base overview and data model	Understand DB overview	V-D 8 105 V-D 8 106
15/May	Date base overview and data model	understand DBMS	V-D 8 105 V-D 8 106
22/May	Date base overview and data model	Install MySQL and how to use it	V-D 8 105 V-D 8 106
29/May	relational algebra	Understand relational algebra	V-D 8 105 V-D 8 106
5/June	holiday		
12/June	relational algebra	Understand relational algebra	V-D 8 105 V-D 8 106
19/June	relational algebra	Understand relational algebra and information math-matics	V-D 8 105 V-D 8 106
26/June	Prepare Exam		
3/July	Midterm Exam		
10/July	Midterm Exam		
17/July	Database design	understand database design	V-D 8 105 V-D 8 106
24/July	Database Design and functional Dependence	understand database design and functional dependency	V-D 8 105 V-D 8 106
5/Aug	Draw ER Diagram	able to draw er diagram	V-D 8 105 V-D 8 106
7/Aug	Normal Form	Understand Normal	V-D 8 105 V-D 8 106
14/Aug	Holiday		
21/Aug	Normal Form	Understand Normal	V-D 8 105 V-D 8 106
28/Aug	MySQL	Make SQL DB from ER diagram	V-D 8 105 V-D 8 106
4/Sept	SQL and PHP	Using SQL on PHP server	V-D 8 105 V-D 8 106
11/Sept	Prepare Final Exam		
18/Sept	Final Exam		

Do not

	Examination	Quiz	Mid-Examination between students	Report	Portfolio	Other
Basic Ability	70					
Practical Ability				50		
Interdisciplinary Ability						