

# 102-1 Preliminary Syllabus, Da-Yeh Univ

| Information       |               |                       |                |
|-------------------|---------------|-----------------------|----------------|
| Title             | 資料庫系統         | Serial No. / ID       | 0902 / IF13027 |
| Dept.             | 資訊工程學系        | School System / Class | 大學日間部3年1班      |
| Lecturer          | 邱瑞山           | Full or Part-time     | 專任             |
| Required / Credit | Required / 3  | Graduate Class        | No             |
| Time / Place      | (五)567 / H707 | Language              | Chinese        |

| Introduction   |
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| The goal of this course is to provide the students with the basic concepts of database systems. The main topics include entity-relationship data model, relational data model, relational algebra, views, query formulation with SQL, normalization, logical and physical database design. |

| Outline  |
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| Databases and Database Users<br>Database System Concepts and Architecture<br>Data Model Using the Entity-Relationship (ER) Model<br>The Enhanced Entity-Relationship (EER) Model<br>The Relational Data Model and Relational Database Constraints<br>Relational Database Design by ER- and EER-to-Relational Mapping<br>The Relational Algebra<br>SQL-99: Schema Definition, Constraints, Queries, and Views<br>Introduction to SQL Programming Techniques<br>Functional Dependencies and Normalization for Relational Databases<br>Relational Database Design Algorithms and Further Dependencies |

| Prerequisite                       |
|------------------------------------|
| C++ Programming<br>Data Structures |