

**DE LA SALLE UNIVERSITY - DASMARINAS**

**COLLEGE OF SCIENCE AND COMPUTER STUDIES**

**INFORMATION TECHNOLOGY DEPARTMENT**

**COURSE SYLLABUS**

COURSE CODE : S-ITPC 121

COURSE TITLE : FUNDAMENTALS OF DATABASE SYSTEMS

COURSE TYPE : LABORATORY

COURSE CREDIT : 3 UNITS

LEARNING MODALITY : FULLY ONSITE

PRE-REQUISITES : NONE

CO-REQUISITES : S-ITPC 121LA

PROFESSOR : MS. AZENITH R. MOJICA

: MONDAY AND TUESDAY 2:00-5:00

: COS 100-C

: ARMOJICA@DLSUD.EDU.PH

: (046) 4811900 LOCAL 3134

**COURSE DESCRIPTION:**

This course prepares the students to acquire the skills on creating, analyzing, and designing databases. This will help increase their understanding of the essentials of database modelling and design, the languages and facilities provided by the database management systems and system implementation techniques.

**COURSE LEARNING OUTCOMES:**

CLO1 . Understand data models, schemas, instances, and their applications in the real world

CLO2 . Design effective database schemas using Entity Relationship Diagram (ERD).

CLO3 . Convert conceptual model into relational schema.

CLO4 . Perform effective data management procedures.

CLO5 . Perform effective logical database design.

CLO6 . Demonstrate 21st century skills in all learning activities.

**LEARNING PLAN**

**Learning Outcomes for Midterm Period**

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| **Course Learning Outcomes** | **Topic Learning Outcomes** |
| CLO1.Understand data models, schemas, instances, and their applications in the real world | TLO1. Effectively explains the basic concepts of databases and data models. TLO2.Explains the features of database management systems, architecture of database systems, and the role of database users. TLO3. Defines the basics of the relational data model. |
| CLO2.Design effective database schemas using Entity Relationship Diagram (ERD). | TLO4. State reasons why many system developers believe that data modeling is the most important part of the systems development process TLO5. Write good names and definitions for entities, relationships, and attributes. TLO6. Draw an E-R diagram to represent common business situations. TLO7. Recognize when to use supertype/subtype relationships in data modeling. TLO8. Develop a supertype/subtype hierarchy for a realistic business situation. TLO9. Develop an entity cluster to simplify presentation of an E-R diagram. |
| CLO3.Convert conceptual model into relational schema. |  |
| CLO4.Perform effective data management procedures. |  |
| CLO5.Perform effective logical database design. |  |
| CLO6.Demonstrate 21st century skills in all learning activities. |  |

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| **Module No and Learning Outcomes** | **Week** | **Teaching-Learning Activities / Assessment Strategy** | **Technology Enabler** | **Onsite / F2F** | **Asynchronous** | **Alloted Hours** |
| Module 0 | Week 1.Feb 13-18 | • Gospel and Reflection• Presentation of the Course Syllabus• Presentation of Module 0: Course Introduction• Activity 1: Class Participation | Schoolbook PowerPoint MS Forms | / |  | 2 |
| TOTAL | | | | 1 | 0 | 2 |

**Learning Outcomes for Final Period**

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| **Course Learning Outcomes** | **Topic Learning Outcomes** |
| CLO3. Convert conceptual model into relational schema. | TLO10. List properties of relations TLO11. Transform an E-R (or EER) diagram into a logically equivalent set of relations. TLO12. Create relational tables that incorporate entity integrity and referential integrity constraints. |