**SEMESTER LEARNING PLAN (RPS)**

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|  | **STATE UNIVERSITY OF PADANG**  **FACULTY OF ENGINEERING**  **ELECTRONIC DEPARTMENT**  **INFORMATIC EDUCATION STUDY PROGRAM** | **Document Code** |
| **SEMESTER LEARNING PLAN (SLP)** | | |

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| **COURSES** | | **CODE** | **Course Group** | **Credit Point(s)** | **SEMESTER** | | **Date Of Creation** |
| Database Design | |  |  | 2 SKS (PRACTICE) | 4 (even) | | July 2017 |
| **Authorization:** | | **Lecturer** | | **Course Coordinator** | | **Coordinator of Study Program** | |
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| **Learning Outcomes (CP)** | **PLO** | | | | | | |
| S8 | Internalizing academic values, norms and ethics | | | | | |
| S9 | Demonstrate an attitude of responsibility for work in their field of expertise independently. | | | | | |
| P3 | Able to formulate various real problems based on concepts related to the field of information and programming. | | | | | |
| KU1 | Able to apply logical, critical, systematic and innovative thinking in the context of developing or implementing science and technology that pays attention to and applies humanities values ​​in accordance with their field of expertise. | | | | | |
| KU5 | Able to make decisions appropriately in the context of problem solving in their area of ​​expertise, based on the results of information and data analysis. | | | | | |
| KU9 | Capable of documenting, storing, securing, and recovering data to ensure validity and prevent plagiarism | | | | | |
| KK1 | Able to apply information technology to solve real problems in the era of the industrial revolution 4.0. | | | | | |
| **CO** | | | | | | |
| CO-1 | Students are able to design ERD using the phpMySQL application | | | | | |
| CO-2 | Students are able to design and create databases using the phpMySQL application | | | | | |
| CO-3 | Students are able to design and create interfaces using web applications. | | | | | |
| CO-4 | Students are able to create source code for each application that has been designed; run applications that have been designed. | | | | | |
| **Course Description** | Students are able to design Entity Relationship Diagram (ERD) and transform in physical form (database) and collaborate with web programming language (interface). | | | | | | |
| **Course Matter** | web programming (interface). | | | | | | |
| **References** | **Main:** | | | | | | |
| 1. Systems Analysis and Desain Method; Sixth Edition, Jeffery L. Whitten, Lonnie D. Bentley, Kevin C. Dittman; McGrawHill; 2004 2. Object-Oriented and Classical Software Engineering Sixth Edition; Stepen R. Schach; McGrawHill; 2005 3. Hitchhiker’s Guide to Visual Basic and SQL Server Sixth Edition; William R.Vaughn; Microsoft Press; 1998 4. Database Management Systems Desain & Building Bussiness Application; Mc.Graw Hill; 2005 5. Mastering SQL Server 2000; Mike Gunderloy, Josep L. Jorder; Sybex; 2000 | | | | | | |
| **Supporting:** | | | | | | |
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| **Learning Media** | **Software:** | | | **Hardware :** | | | |
| 1. Html 2. PhpMySQL | | | Laptop, LCD & Projector | | | |
| **Lecturer** | Database Design Lecturer Team | | | | | | |
| **Prerequisites** | - | | | | | | |

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| **Weeks-** | **Sub-CO**  **(Expected Final Ability in each learning stage)** | **Assessment Indicator** | **Assessment Criteria** | **Learning Method, Students’ Learning Experience**  **[Time Allocation]** | **Learning Material**  **[Topic from Reference]** | **Score (%)** |
| **(1)** | **(2)** | **(3)** | **(4)** | **(5)** | **(6)** | **(7)** |
| 1-3 | Students are able to design ERD using the phpMySQL application | Introduction:  Learning Contracts, and Introduction to MySQL Structures. | **Criteria**:  Grading criteria rubric  **Non-test form**:   * Practice Designing ERD using PhpMySQL properly * Report practice; | * **Lectures & discussions**   **[TM: 1x (3x50 ”)]**  • **Task 1**: Designing ERD using PhpMySQL properly  **[BT + BM: (1 + 1) x (3x60 ”)]** | Designing ERD using PhpMySQL properly | **10** |
| 4-6 | Students are able to design and create databases using the phpMySQL application | Designing and Creating a database using PhpMySQL properly | **Criteria**:  Grading criteria rubric  **Non-test form**:   * Practice Designing and Creating a database using PhpMySQL properly; * Practice report; | * **Lectures & discussions**   **[TM: 1x (3x50 ”)]**   * **Task 1** : Design and build database using PhpMySQL properly.   **[BT + BM: (1 + 1) x (3x60 ”)]** | Using PhpMySQL | **15** |
| 7-9 | Students are able to design and create interfaces using web applications. | Design and make interfaces using web applications well | **Criteria**:  Grading criteria rubric  **Non-test form**:   * Practice Designing and making interfaces using web applications well * Practice report; | * **Lectures & discussions**   **[TM: 1x (3x50 ”)]**  **Task 1**: Design and make interfaces using web applications well. **[BT + BM: (1 + 1) x (3x60 ”)]** | Using PhpMySQL | **15** |
| 10 | Midterm exam | | | | | **5** |
| 11-15 | Students are able to create source code for each application that has been designed; run applications that have been designed. | Create source code properly and run applications properly. | **Criteria**:  Grading criteria rubric  **Non-test form**:  Practice: Source code properly and run applications correctly.   * Practice report; | * **Lectures & discussions**   **[TM: 1x (3x50 ”)]**  **Duty**: Properly source code and run applications correctly.  **[BT + BM: (1 + 1) x (3x60 ”)]** | Using PhpMySQL |  |
| 8 | **Final Exam / Semester Examination** | | | | |  |