

Laboratory in Computer Science 1

Syllabus Number

3C315

Basic Major Subjects

Elective Requisites 2
credit

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1. Course Description

This course executes information system development projects as project based learning (PBL). In a development project, a development team plans, designs, implements and tests information systems for the Request for Proposal (RFP) of a theme that is provided at the start phase of this course. Finally, the team releases the system together with project deliverables.

In Laboratory in Computer Science 1, teams mainly process to plan and to design the system.

This course is related to diploma policy DP2 and DP4C.

2. Course Objectives

The learners will be able to:

- design information systems.
- execute a project systematically by collaborating with team members.
- understand methods of project management and execute necessary management tasks from the standpoint of a project manager.
- make an oral presentation that is easy to understand.

3. Grading Policy

The grade of students will be calculated according to the following process: project product 50%, presentation 20%, reports 30%. To pass, students must earn at least 60 points out of 100.

A debrief session is held in each class to see project progress. Feedbacks on project activities and product are provided in this session.

4. Textbook and Reference

Textbook

Learning materials on LMS, textbooks and document used in the following courses: Software Technologies for Information Systems Development, Project Management, Information System Design, Exercises in Information System Development and Software Engineering.

5. Requirements(Assignments)

For preparation and after-class learning, students are expected to do activities for project execution and review the missing skills. The preparation and after-class learning will take about two or three hours.

6. Note

Information Systems Development, Information System Design and Exercises in Information System Development should always be taken in parallel. Students are expected to understand the contents in laboratory in Fundamental Computer Science 2, each course of programming, database systems, web technology, computer networks and data structure and algorithms.

This course is a required subject in the JABEE program, and corresponds to the items 2-4 and 6-3 in learning and achievement goals.

7. Schedule

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| [1] | System development PBL 1-1 (determining the theme) |
| [2] | System development PBL 1-2 (project planning) |
| [3] | System development PBL 1-3 (project planning) |
| [4] | System development PBL 1-4 (preparation of requirement definition document) |
| [5] | System development PBL 1-5 (preparation of requirement definition document) |
| [6] | System development PBL 1-6 (Basic Design) |
| [7] | System development PBL 1-7 (Basic Design) |
| [8] | System development PBL 1-8 (Basic Design) |
| [9] | System development PBL 1-9 (Basic Design), midterm review session |
| [10] | System development PBL 1-10 (Detailed Design) |
| [11] | System development PBL 1-11 (Detailed Design) |
| [12] | System development PBL 1-12 (Detailed Design) |
| [13] | System development PBL 1-13 (Detailed Design) |
| [14] | System development PBL 1-14 (Detailed Design) |
| [15] | Final review session |