

Course Syllabus

1. **Name of Curriculum** Bachelor of Science (Computer Science)
Mahidol University International College
2. **Course Code** ICCS365 **Course Title** Information Systems
Analysis and Design
3. **Number of Credits** 4 **(Lecture/Lab)** (4-0)
4. **Prerequisites**
ICCS 203
5. **Type of Course**
Required for 3rd year Computer Science students
6. **Trimester/ Academic Year**
First trimester / 2004-2005

7. Course Description

This course will provide the knowledge in information system development strategies. Problem identification and feasibility studies are also considered. The focus of this course is in the Software development life cycle. Students have to practice on the real systems by applying the theory. Also, students must be able to analyze and design the computerized system in the organization properly.

8. Course Objectives

1. To be able to understand the concepts of information systems
2. To be able to use System Development Life Cycle (SDLC) in real-world cases
3. To be able to analyze the current information system in the organization
4. To be able to design and implement proper information systems in the organization
5. To be able to use Data Flow Diagram, Data Dictionary and other analysis and design tools in proper manner

9. Course Outline

week	Lecture Topic	Hour
1	- Assuming the Role of the Systems Analyst	4
2	- Understanding Organizational Style and Its Impact on Information Systems	4
3	- Determining Feasibility and Managing Analysis and Design Activities	4
4	- Sampling and Investigating Hard Data	4
	- Interviewing, Using Questionnaires and Observing Decision-Maker Behavior and The Office Environment	
5	- Prototyping	4
6, 7	- Using Data Flow Diagrams	8
	- Analyzing Systems Using Data Dictionaries	
8	- Describing Process Specifications and Structures Decisions	4
	- Preparing The System Proposal and Writing and Presenting the Systems Proposal	
9, 10	- The Essentials of Design	8
11	- Quality Assurance Through Software Engineering	4
	- Successfully Implementing The Information System	
11	Total	44

10. Teaching Methods

Lecturing, demonstration and presentation

11. Teaching Media

Slides, handouts

12. Course Achievement

Assessment made from the set-forward criteria according to the MUIC's grading policy.

13. Course Evaluation

Class attendance	5 %
Mid-Term Exam	25 %
Final Exam	35 %
Term Project	25 %
Assignment and/or quiz	10 %

14. References

- Kendall & Kendall, *Systems Analysis and Design*, Sixth Edition, Practice Hall, Inc, 2005
- Alan L. Eliason, *System Development Analysis, Design and Development*, 1990.

- Satzinger et. al, System Analysis and design in a changing world, Course Technology, 2002
- Graham Curtis and David Cobham, Business Information Systems: Analysis, Design and Practice Fourth Edition, Financial Times Prentice Hall, 2002

Term Project

Form the team of three (3) members to design the new computerized information system to replace the existing one. Start by preparing the proposal of your project to identify the reason and need of designing the new system. Afterward, submit the papers according to the lesson studied from previous week. The papers are to be submitted every week start from the week that chapter 5 is finished. This term project is the group work only. So, the individual work is not allowed.

Content in the proposal:

Your proposal must contain following topics:

1. Introduction of project
 - a. General Information
 - b. Overview of problems in current system
2. Objectives
3. Expected result
4. Project scope
5. Current system analysis (include the current system's Context diagram)
6. New system development plan
7. Schedule for system development
8. Input/Output interface design
9. File / Database Design

15. Instructors

Mr.Poramin Bheganan

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