Introduction to Information System Course Specifications

Faculty: Computer and Informatics

Department: Computer Science

Program(s) on which the course is given : Bachelor in Computer and Information Sciences

Major or Minor element of programs : All majors

Department offering the program : Computer Science

Department offering the course : Information System

Academic year / Level : 2nd Year / B.Sc.

Date of specification approval : 20/9/2009

A. Basic Information

Title: Introduction to Information System **Code:** INF 280

Lectures: 3 hrs/week **Practical:**2 hrs/week

Tutorial: --- **Credit Hours:** ---

Total: 5 hrs/week

B. Professional Information

1. Overall Aims of Course:

An introductory course in Information Systems is the study of data and processes that

interact as a system to accomplish specific goals. Information systems can be manual or automatic; this course is primarily concerned with Computer Based Information Systems (CBIS). A CBIS consists of hardware, software, databases, telecommunications, people, and procedures. Through hands-on projects, the students will examine the different types of Information Systems and learn to construct) them using the Software Development Life Cycle (SDLC)

Students shall be able to:

1. Provide an understanding of Information Systems, its components and their interactions.
2. Describe the different types of Information Systems and their employ in business applications.
3. Give examples to illustrate how E-business, E-commerce, or Enterprise systems could support a firm's business processes, managerial decision making, and strategies for competitive advantage.
4. Examine the Systems Development Life Cycle and its importance in the development of new systems and maintenance of existing systems.
5. Gain experience in analyzing and designing Information Systems through group projects.
6. Encourage collaboration and civic participation through group assignments.

2. Intended Learning Outcomes of Course (ILOs):

a- Knowledge and Understanding:

a1. Identify and explain the different types of Information Systems.

a2. Describe the steps in the Software Development Life Cycle (SDLC).

a3. Identify and describe different types of SDLC methodologies.

a4. Identify the inputs and outputs at each stage of the SDLC.

a5. Identify tools required for each stage of the SDLC.

a6. Define the term organization and identify its components.

a7. Define systems software and identify examples.

a8. Define applications software and identify examples.

a9. Define data management concepts and terms.

a10. Describe the functionality of a DBMS.

a11. Identify the components of a telecommunications system.

a12. Describe the different communications protocols.

a13. Identify the benefits associated with a telecommunications network.

b. Intellectual skills

b1. Gain experience in analyzing and designing Information Systems through group projects.

b2. Describe the advantages and disadvantages of a Database Management System (DBMS).

b3. Explain the role of information in an organization.

C. Professional and practical skills

c1. Analyze and design a solution for a "real-world" Computer Business Information System.

c2. Construct reporting and evaluating IS projects

D. General and transferable skills:

d1. Write effective and descriptive IS projects documentation

d2. Present a timeline for project plan

d3. Implement software modules using one of the suggested methods for development

d4. test software modules in an efficient manner

d5. create Information systems

E. Attitude:

e1. A knowledge and respect of ethical standards in relation to a major area of study.
e2. Learn how to make relation with other, and the limit of this relation.
e3. Explain the nature of privacy and how it is protected by the Data Protection.
e4. Know the danger of viruses and how to protect yourself from it.

3. Contents:

week	Hours	Week Commencing	Topics	Chapter	Practical
1	3	4/10/2009	An Introduction to Information Systems	1	Introduction to Java Database Programming
2	3	11/10/2009	An Introduction to Information Systems	1	Database Fundamentals
3	3	18/10/2009	Computer hardware	3	Database Integration With JDBC
4	3	25/10/2009	Computer Software	4	Database Connectivity, Step by Step
5	3	1/11/2009	Data Resource Management	5	Fine Tuning JDBC Queries and Updates
6	3	8/11/2009	Data Resource Management	5	• Fine Tuning JDBC Queries and Updates • Retrieving Data with SQL Queries
7	3	15/11/2009	**Midterm –exam**		Inserting, Updating, and Deleting Data
8	3	22/11/2009	Telecommunications and Networks	6	advanced techniques of Structured Query Language (SQL) and Java Database Connectivity (JDBC)
9	3	29/11/2009	Telecommunications and Networks	6	advanced techniques of Structured Query Language (SQL) and Java Database Connectivity (JDBC)
10	3	6/12/2009	Electronic Business Systems	7	Building a Client/Server Application
11	3	13/12/2009	Enterprise Business Systems& Electronic Commerce Systems	8&9	Building a Client/Server Application
12	3	20/12/2009	Decision Support Systems	10	Practical exam
13	3	27/12/2009	Decision Support Systems	10	Projects presentation and oral exam
14	3	4/01/2010	Final exam		
15	3	11/01/2010			