

DEREE COLLEGE SYLLABUS FOR:

CS 1070 INTRODUCTION TO INFORMATION SYSTEMS – LEVEL 4
(Updated Fall 2010)

UK Credits: 15

PREREQUISITES: None

**CATALOG
DESCRIPTION:**

Computer hardware and software. Data acquisition, storage and manipulation. Data communications. The Internet and the Web. Principles of information systems. Present and future trends in information technology. The social impact of IT. Training on computer application packages.

RATIONALE:

The purpose of this course is to provide computer literacy to the student. The course is designed to prepare the student for a successful working relationship with computerized systems and will present to him/her what the computer is, what it can and cannot do, how it operates, how it is programmed, how it is used as a tool in decision making, and what are the social implementations of computer usage.

LEARNING OUTCOMES :

- As a result of taking this course, the student should be able to:
1. Analyze the types and functions of computers and the components of a computer system.
 2. Define and categorize application and system software and use general purpose application packages.
 3. Categorize hardware devices.
 4. List the various network communication technologies and the uses of computer networks including the Internet.
 5. Analyze the impact of computers on society and on the workplace.
 6. Describe the system and program development lifecycles and list the main programming languages.

**METHOD OF TEACHING
AND LEARNING :**

- Classes consist of lectures, class discussions, problem-solving sessions and review of cases taken from the real world and applicable to specific theoretical concepts.
- Office hours: Students are encouraged to make full use of the office hours of their instructor, where they can ask questions and go over lecture material.
- Use of the Blackboard platform to further support communication, by posting lecture notes, assignment instructions, timely announcements, and for online submission of assignments.
- Peer tutoring is available to students who choose to get additional help

ASSESSMENT:

Summative:

Coursework (take-home assignments)	40
Final Examination (2-hour comprehensive; short answers to essay questions)	60

Formative:

In-Class “diagnostic” test (short answers to essay questions)	0
---	----------

The formative test aims to prepare students for the examination.
The final examination tests Learning Outcomes 1-6
The Coursework tests Learning Outcome 2.

READING LIST:

REQUIRED MATERIAL:

Shelly B. Gary, Vermaat E. Misty. Discovering Computers: Fundamentals. Shelly Cashman Series, Course Technology, latest edition.

FURTHER READING:

- Instructor’s notes.
- Bidgoli Hossein, Encyclopedia of information systems. Academic Press, 2003.
- Microsoft Office 2007: Introductory Concepts and Techniques, Windows Vista Edition (Shelly Cashman)
- Morley Deborah, Parker S. Charles. Understanding Computers: Today and Tomorrow, Introductory. Course Technology, latest edition.

COMMUNICATION REQUIREMENTS:

Daily access to the course’s site on the College’s Blackboard CMS.
Effective presentation skills using proper written and oral English.

SOFTWARE REQUIREMENTS:

MS-Word, MS-PowerPoint, MS-Excel, MS-FrontPage.

WWW RESOURCES:

- <http://login.course.com>
- <http://www.microsoft.com>
- <http://www.w3.org>
- <http://www.computerworld.com>

INDICATIVE CONTENT:

- I. Theoretical and Descriptive Part**
1. Introduction to Computers
 - 1.1. Computer Competency
 - 1.2. Kinds of Computer Systems
 - 1.3. Components of a Computer System
 2. The Internet and the Web

- 2.1. Internet Applications and Services
- 2.2. Application Software
3. Business software
 - 3.1. Graphics & Multimedia Software
 - 3.2. Software for Home, Personal and educational use
 - 3.3. S/W for communications
4. Hardware
 - 4.1. System Unit and Primary Memory
 - 4.1.1. Data Representation Codes
 - 4.1.2. Components of the System Unit
 - 4.2. Input and Output Devices
 - 4.3. Secondary Storage Devices
5. System Software
 - 5.1. Operating System Functions & types
 - 5.2. Utility programs
6. Communications and Networks
 - 6.1. Data Communications Concepts
 - 6.2. Network Types and uses
7. Databases
 - 7.1. Data Files, Organization, Processing Methods
 - 7.2. Database Concepts
8. Legal, Ethical and Social Impact of Computing
 - 8.1. Privacy ,Security and Ethics
 - 8.2. Ergonomics and the Environment
9. Programming and Languages
 - 9.1. Programming Process
 - 9.2. Generations of Programming Languages

II. Laboratory practical sessions:

1. MS-Windows
2. Internet/ Web /E-mail
3. Blackboard CMS
4. MS-Word
5. MS-PowerPoint
6. MS-Excel
7. MS-Expression Web