**King Saud University**

**College of Computer and Information Sciences**

**Department of Information Systems**

**IS201–Fundamentals and Ethics of Information Systems (3-0-1)**

**Instructor: Dr. Ahmed Youssef**

**Textbook(s) and/or Other Required Materials:**

#### Primary Book: Ralph Stair and G. Reynolds, *Information Systems Essentials*, Thomson Course Technology, latest edition

**Material on LMS:**  https://lms.ksu.edu.sa/

**Prerequisites:** None

**Co-requisite:** None

**Course Type:** Required

**Contact Information:**

* **Office:** Room 2152
* **email:** balkhamees@ksu.edu.sa
* **Office hours: 11 – 1:30 (Monday-Thursday)**

**Course Description (catalog):**

This course introduces students to the fundamentals of information systems and to ethical issues related to information systems as a discipline and profession. Topics covered include: definition of information systems, hardware and software, the binary system, telecommunications and networks, concepts of information, database approach to data management, systems development, specialized information systems, moral, legal and social issues in the cyberspace, professional conduct, personal, local and global impacts of computers, and IS professionals’ need for continuous professional development.

**Course Learning Outcomes:** After completing this course, the students will be able to:

1. Identify and describe the components of an information system
2. Identify and describe the functions of computer hardware and software
3. Identify the binary number system and logic gates
4. Identify major advantages of the database approach
5. Understand telecommunications and computer networks
6. Identify different types of information systems
7. Identify ethical and security issues related to information systems
8. Analyze local and global impacts of information systems on organizations
9. Recognize the need for continuous professional development
10. Identify legal and social issues related to information systems

**Student Outcomes Covered by the Course**

|  |  |  |
| --- | --- | --- |
| **Outcome** | **ABET Student Outcome Description** | **Coverage** |
| (a) | 1. An ability to apply knowledge of computing and mathematics appropriate to the discipline | **√** |
| (b) | 1. An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution |  |
| (c) | 1. An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs |  |
| (d) | 1. An ability to function effectively on teams to accomplish a common goal |  |
| (e) | 1. An understanding of professional, ethical, legal, security and social issues and responsibilities | **√** |
| (f) | 1. An ability to communicate effectively with a range of audiences |  |
| (g) | 1. An ability to analyze the local and global impact of computing on individuals, organizations, and society | **√** |
| (h) | 1. Recognition of the need for and an ability to engage in continuing professional development | **√** |
| (i) | 1. An ability to use current techniques, skills, and tools necessary for computing practice. |  |
| (j) | 1. An understanding of processes that support the delivery and management of information systems within a specific application environment. |  |

**Course Outcomes vs. Student Outcomes**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| # | Course Outcomes | ABET Student Outcomes | | | | | | | | | |
| A | B | C | D | E | F | G | H | I | J |
| 1 | Identify and describe the components of an information system | X |  |  |  |  |  |  |  |  |  |
| 2 | Identify and describe the functions of computer devices | X |  |  |  |  |  |  |  |  |  |
| 3 | Convert a number from and to the binary system | X |  |  |  |  |  |  |  |  |  |
| 4 | Identify major advantages of the database approach |  |  |  |  |  |  | X |  |  |  |
| 5 | Identify major ethical issues related to information systems |  |  |  |  | X |  |  |  |  |  |
| 6 | Analyze the local and global impact of computing |  |  |  |  |  |  | X |  |  |  |
| 7 | Recognize the need for continuous professional development |  |  |  |  |  |  |  | X |  |  |
| 8 | Understand social issues and responsibilities related to information systems |  |  |  |  | X |  |  |  |  |  |
| 9 | Understand major legal issues of computing |  |  |  |  | X |  |  |  |  |  |

**Major Topics covered and schedule in weeks:**

|  |  |
| --- | --- |
| * Introduction to information systems in organizations | 2 |
| * Hardware and software | 2 |
| * The binary system | 2 |
| * Organizing data and information | 2 |
| * Telecommunications, the internet, intranets and extranets | 1 |
| * Ethics in information systems | 2 |
| * The personal and social impact of computers | 1 |
| * Continuous professional development | 1 |
| * Local and global impact of computing on the work environment | 1 |
| * Legal issues of computing | 1 |

**Evaluation Criteria (TENTATIVE)**

* Quiz1 5%
* Quiz2 5%
* Quiz3 5%
* Lab/Tut 5%
* Mid1 20% -------
* Mid2 20% --------
* Final 40%

**Absence**

* Absences of more than 25% of classes (**lectures+tutorials**) will result in automatically being barred from attending the final exam.
* The 25% of absence allowed is dedicated for those cases when someone is sick or for emergencies. Please **DO NOT** bring excuses.