

CPIS-220 Syllabus

Catalog Description

CPIS-220 Principles of Information Systems

Credit: 3 (Theory: 3, Lab: 1, Practical: 1)

Prerequisite: CPCS-202

Classification: Department Required

The objective of this course is to provide students with an overall understanding of the main concepts of information systems and to highlight the importance of information systems in modern organizations and societies. Topics include information, data, and system concepts, information requirements in modern organizations and businesses (including decision making, operations, and other types of requirements), introducing different types of information systems, exploring the systems development life cycle (analysis, design, and implementation), methodologies of developing information systems, managing resources of information systems (data, hardware, software, etc.), knowledge management, quality and evaluation of information systems, ethical, social, and security issues of information systems

Class Schedule

Meet 50 minutes 3 times/week or 80 minutes 2 times/week

Lab/Tutorial 90 minutes 1 times/week

Textbook

O'Brien, James A., Marakas, George M., "Introduction to information systems", McGraw-Hill/Irwin; 14 edition

ISBN-13 9780077240585 **ISBN-10** 0077240588

Grade Distribution

| Week | Assessment | Grade % |
|------|--------------------------|---------|
| 4 | Quiz 1 | 2.5 |
| 5 | Graded Lab Work | 5 |
| 6 | Exam 1 | 15 |
| 8 | Quiz 2 | 2.5 |
| 12 | Exam 2 | 15 |
| 14 | Group Project | 15 |
| 15 | Lab Exam | 5 |
| 16 | Comprehensive Final Exam | 40 |

Last Articulated

October 2, 2017

Relationship to Student Outcomes

| a | b | c | d | e | f | g | h | i | j |
|---|---|---|---|---|---|---|---|---|---|
| x | | | | | | | | | |

Course Learning Outcomes (CLO)

By completion of the course the students should be able to

1. Illustrate how and why information systems are used today. (a)
2. **Articulate various components and emerging technologies that enable new forms of communication and collaboration in an organization to solve business problems. (a)**
3. Analyze the different roles of information systems and information technology that are growing in the business environment to support globalization. (a)
4. Research how firms are using information systems to attain competitive advantage in an organization and to estimate its value by empowering investments in terms of costs and benefits. (a)
5. Summarizes the various threats, vulnerability and risks of a computer system as well as plans made to recover from disasters. (a)
6. **Apply the fundamental concept of information systems used in the enterprise systems. (a)**
7. Classify the influence of artificial intelligence, expert systems, virtual reality and other specialized system on the society and organizations. (a)
8. **Construct the knowledge of database management system approaches by creating and using tables, forms, queries and reports in a database. (a)**
9. Explain the basic knowledge of wired and wireless and various components used in the telecommunication for individual and in an organizations. (a)
10. **Establish how various types of information systems attains the information using business intelligence to support decision making for the different levels and functions of the organization. (a)**
11. **Observe the new form of E-commerce and M-commerce facilitated by information systems between individuals, organizations, and governments sectors. (a)**
12. Apply the major concept of information system used in the system development life cycle. (a)
13. Discover how to secure information systems resources aiming on both human and technological safeguard perspectives. (a)
14. Recall the ethical concerns that information systems raise in society and the impact of information systems on crime,

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Topics Coverage Durations

| Topics | Weeks |
|---|-------|
| An Introduction to Information Systems in Organizations | 2 |
| Hardware and Software Overview | 1 |
| Database Systems, Data Centers and Business Intelligence | 2 |
| Telecommunications, The Internet, Intranets and Extranets | 1 |
| Electronic and Mobile Commerce and Enterprise Systems | 2 |
| Information and Decision Support Systems | 2 |
| Knowledge Management and Specialized Information Systems | 2 |
| Systems Development | 2 |
| The Personal and Social Impact of Computers | 1 |

Coordinator(s)

Dr. Hussain Sindi, Associate Professor