

Course Outline

1. Course : **Information Management**
2. Code : CMC 103
3. Credit : 3 Credits
4. Objectives : To understand the importance of information in business
To know the technologies and methods used for effective decision making in an organization
5. Short Description : Gains knowledge on effective applications of information systems in business through understanding of data, information & intelligence, system analysis & design, database management systems and security, control & reporting
6. Time & Venue : -

Course Outlines

Introduction

Data, Information, Intelligence, Information Technology, Information System, evolution, types based on functions and hierarchy, System development methodologies, Functional Information Systems, DSS, EIS, KMS

System Analysis and Design

Case tools - System flow chart, Decision table, Data flow Diagram (DFD), Entity Relationship (ER), Object Oriented Analysis and Design(OOAD), UML diagram.

Database Management System

DBMS – HDBMS, NDBMS, RDBMS, OODBMS, Query Processing, SQL, Concurrency Management, Data warehousing and Data Mart

Security, Control and Reporting

Security, Testing, Error detection, Controls, IS Vulnerability, Disaster Management, Computer Crimes, Securing the Web, Intranets and Wireless Networks, Software Audit, Ethics in IT, User Interface and reporting.

New IT Initiatives

Role of information management in ERP, e-business, e-governance, Data Mining, Business Intelligence, Pervasive Computing, Cloud computing, CMM.

References:

1. Robert Schultheis and Mary Summer, Management Information Systems – The Managers View, Tata McGraw Hill, 2008.
2. Kenneth C. Laudon and Jane Price Laudon, Management Information Systems – Managing the digital firm, PHI Learning / Pearson Education, PHI, Asia, 2012.
3. Other relevant paper on database management system

Assignments

- Create 3 papers about information management based on the following criteria
 - Paper #1 SLR (scientific literature review) → to know current issue in information management
 - Paper #2 Choose of current topics from paper #2. Do the critical literature review
 - Paper #3 Define the research idea for research pre-proposal based on the findings from paper #2
- Due date for these papers are (week 5, week 10 & week 14)
- Format papers follow IEEE (paper #1), lecture notes (paper #2) & ACM (paper #3) with maximum of pages are 8 pages
- Choose 3 Of the following topics:
 - Fundamental concept of DBMS in terms of optimization & access data
 - Information retrieval
 - Quality and security control in DBMS
 - Functional of information system
 - Other relevant topics on DBMS
- Format paper
 - Research in this topic dead or alive?
 - Research issues or open problems in the topic for 8 years and its impacts to business
 - Challenges that still arise in this topic
 - Discussion (gap between the real condition and theory, how to minimize the gap, effect of the gap to business and other relevant topic to improve these issues, etc)
 - Conclusion