COURSE TITLE: **MANAGEMENT INFORMATION SYSTEMS**

COURSE CODE: **CSC 7102**

HOURS TAUGHT: **3 hrs per week**

PREREQUISITES: **None**

PURPOSE OF COURSE

This course provides the student with an overview of today's management information systems (MIS). The premise is that business initiatives should drive technology choices. Every discussion first addresses the business needs and the addresses the technology that supports those needs. This course is designed to give students the ability to understand how information technology can be a point of strength for an organization.

The student will demonstrate an understanding of complementary managerial views of information's value and use within the organization via technologies such as radio frequency identification (RFID), data warehousing, and data mining. In addition, the student will study the flow of information through the organization using an Enterprise Resource Planning (ERP) system as a framework. The student will also demonstrate an understanding of the complementary managerial views of information as an operational, managerial, and strategic resource.

EXPECTED LEARNING OUTCOMES

By the end of the course students will be able to:

- Explain the systems approach to business, the major business systems, and subsystems.
- Explain how technology supports and integrates functional areas throughout an organization.
- Discuss the Systems Development Life Cycle (SDLC) and the major activities within each phase.

Describe the role of data and information and management information systems in an organization.

Explain the use personal productivity software tools to complete assignments and other tasks.

COURSE CONTENT

Overview of Information Systems

- Data, Information, and Systems
- Data vs. Information
- What Is a System?
- Transaction Processing Systems
- Management Information Systems
- Information Systems in Functional Business Areas
- Information Systems in Different Business Sectors
- Shared Data Resources

Management of Information Systems

- Strategic Uses of Information Systems
- Strategy and Strategic Moves
- Achieving a Competitive Advantage
- Strategic Information as a Competitive Weapon
- Creating an SIS
- Re-engineering and Organizational Change
- Competitive Advantage as Moving Target
- Sources of Strategic Information Systems
- Business Process Redesign

Managers and Information

- The Organizational Pyramid
- Clerical and Shop Floor Workers
- Operational Management
- Tactical Management

- Strategic Management

Characteristics of Information at Different Managerial Levels

- The Nature of Managerial Work
- Organizational Structure
- Characteristics of Effective Information
- Managers and Their Information Systems
- Transaction Processing Systems
- Decision Support Systems and Expert Systems
- Executive Information Systems
- Information, Politics, and Power

Managing Information Technology Resources

- Information Systems Architecture and Management
- Centralized Information Systems Architecture
- Decentralized Information Systems Architecture
- Distributed Information Systems
- Organizing the IS Function
- Challenges for IS Managers and Line Managers
- Line Manager Expectations of an IS Unit
- IS Manager Expectations of Line Managers
- Chargeback Methods
- Careers in Information Systems

Information Systems In Business

- Accounting
- Finance
- Cash Management
- Investment Analysis and Service
- Engineering
- Enterprise Resource Planning System
- Radio Frequency Identification

Manufacturing and Inventory Control

- Materials Requirement Planning

- Manufacturing Resource Planning
- Manufacturing Execution Systems

Marketing, Sales, and Customer Service

- Market Research
- Targeted Marketing
- The Personal Computer as a Marketing and Selling Medium
- Sales Force Automation
- Customer Service

Human Resources

- Employee Record Management
- Promotion and Recruitment
- Training
- Evaluation
- Compensation and Benefits Management

Groupware and Collaborative Work

- Document Control
- Collaborative Projects
- Supply Chain Management
- Electronic Data Interchange
- Global Information Systems
- International and Multinational Organizations
- Using the Web for International Commerce
- Challenges to Global Information Systems

Decision Support and Business Intelligence

- Decision Support and Expert Systems
- The Decision-Making Process
- Structured and Unstructured Problems
- Expert Systems
- Geographic Information Systems
- Business Intelligence and Knowledge Management
- Data Mining and Online Analysis

- Executive Dashboards
- Capturing and Sorting Organization Knowledge
- Knowledge Networks

Planning, Acquisition, and Controls

- Systems Planning and Development
- Planning Information Systems
- System Development Life Cycle
- Systems Integration
- Systems Acquisition
- Outsourcing
- Licensing Applications
- User Application Development
- Risks, Security, and Disaster Recovery
- Goals of Information Security
- Risks to Information Systems and Online Operations
- Controls
- Security and Recovery Measures
- Economics of Security Measures

Ethical and Societal Issues

- Consumer Protection and Privacy
- Employee Rights And Privacy
- Global Free Speech
- Ethical Business Practices

MODE OF DELIVERY

- Lectures

- Reading assignments

- Practical assignments

- Documentaries

INSTRUCTIONAL MATERIALS AND / OR EQUIPMENT

- Whiteboard and Markers
- Flip Charts
- LCD Projectors
- CDs, DVDs and Tapes

COURSE ASSESSMENT

- Continuous assessments tests 20%

- Group and individual project (course work) 20%

- End of Semester Examination 60%

READING MATERIALS

Kroenke, D.M. (2010). Experiencing MIS, 2nd edition. Upper Saddle River, NJ:
Prentice Hall.

Shelly,G.B., Cashman, T.J. & Vermaat, M.E. (2009). Office 2007 introductory
concepts and techniques. Cambridge, MA: Course Technology.

Baltzan, P. & Phillips, A. (2008). Business driven information systems. Chicago,   IL:
Irwin/McGraw-Hill.

Bocij, P., Hickie, S. & Greasley, A. (2009). Business information systems:
Technology, development and management, 4th edition. Upper Saddle River, NJ:
FT   Press.