

HOSPITAL INFORMATION SYSTEMS

This course introduces the student to information systems terminology, structures, specific applications, and their relationships to management functions in health services organizations. Health providers and health systems are continuing to make multi million dollar investments in information systems in order to meet new market and regulatory requirements. All health services managers will play a role in the analysis, design, acquisition, installation, operation and ultimate success of information systems necessary to meet organizational goals and objectives. This course exposes students to the IS/IT applications used to support management functions. Further applications and management issues unique to industry segments (e.g., long – term care, home care, hospital administration, physician practice management) will also be explored.

The goal of the course is to ensure that students are schooled in the terminology, conceptual models, applications and opportunities and limitations of information systems in health services.

Syllabus covers the following topics:

Unit I : Introduction to Management Information Systems

What is an Information System, Information technologies, what is a system. Feedback and Control, Components of Information System, Information System Resources, Overview of Hardware and software, Relationship of Hospital Information systems to managerial functions such as communications, coordination, control strategic and process planning and decision making.

Unit II : Overview and basic concepts of Hospital Information Systems.

Need for Hospital Information Systems, Understanding of the basic structures of information systems in health administration.

Unit III : Data Resource Management

Foundation data concepts, Types of databases, Database maintenance and Application development, implementing data resource management.

Unit IV : Decision Support

Information, decisions and management, Information quality, Decision structure, DSS components, Using DSS.

Unit V : Security and Ethical Challenges

Introduction, Technology ethics, guidelines, Computer crime, Privacy issues, computer monitoring, challenges in working conditions, Ergonomics.

Suggested text books

1. Management Information systems – Managing Information technology in the Business enterprises – James A.O’ Brien Tata Mc. Graw Hill 6th Edition (2004).
2. Management Information System – Organisation and Technology – Kenneth C. Landon, Jane P. London PH1 4th Edition (1998).