

THE OPEN UNIVERSITY OF TANZANIA
FACULTY OF BUSINESS MANAGEMENT

OBS 206/OMI 300: MANAGEMENT INFORMATION SYSTEMS
COURSE OUTLINE

INTRODUCTION

There are several trends occurring in the world today, among many is the movement to computer based information systems. Managers need to be informed about the trends in information systems and hence participate fully in its development and management. Therefore, the objective of this course is to make students identify information systems needs and participate in its development in order to create a business competitive advantage.

Specifically, this course intends to make the students be able to:

- a) Define different types of information systems
- b) Participate in structured information systems developments as a knowledgeable person from planning, feasibility study, information requirement analysis, design, implement, maintain, and evaluate.
- c) Identify other information systems development, their advantages and Disadvantages, when they are appropriate and when they should not be used.

LECTURE 1: SYSTEMS CONCEPT

Key Subtopics:

1. Systems concept
2. Definition of system, subsystems, and supra-systems.
3. Environment of a system: internal and external and their controllability
4. General systems model
5. Systems Performance: effectiveness, efficiency, productivity
6. Systems approach

Reference:

Nash and Roberts (1984) Chapter 2, pp.19-32.

Schultheis and Sumner (1992), Chapter 2, pp-30-74.

McLeod (1986), Chapter 3 and 4, pp.78-149.

Whitten et al (1989): Chapter 2, pp.38-44.

LESSON 2: INFORMATION SYSTEMS LIFE CYCLE

Subtopics

1. Definitions
2. Principles of successful IS development
3. Phases of IS Development life cycle
4. Challenges for IS Development life cycle

Reference:

Whitten et al (1989), Chapter 4, pp.77-106.

LESSON 3: INFORMATION SYSTEMS

Subtopics

1. Definitions
2. Types
3. Basic features
4. Examples of modern Information systems
 - a) Transaction Information systems
 - b) Management reporting systems
 - c) Decision support systems
5. Reports: detailed, historical, summary and exception reports.
6. Challenges in building Information systems

Reference:

Laudon and Laudon (19..) Chapter 2, pp.417-444.

Nash and Roberts (1989) Chapter I, pp3-18.

Whittnen et al (1989), Chapter 3, pp.47-63.

LESSON 4: INFORMATION SYSTEMS PLANNING

Subtopics

1. The need for Information Systems Planning
2. Definition requirements
3. Project selection and feasibility studies
4. Strategic planning and Information technology and competitive advantage

5. Planning strategies (critical success factors, business systems planning, organizing IS Plan)

6. Scenario approach to planning

Reference:

Schultheis and Sumner (1992), Chapter 15, pp.

McLead (1986) Chapter 16, pp679-719.

Koorv and Medley (1986). Chapter 3.0057-76.

LESSON 5: TOOLS AND TECHNIQUES FOR INFORMATION SYSTEMS DEVELOPMENT

Subtopics

1. Flow charts

2. Decision tables

3. Data flow diagrams

4. Decision flow diagrams

5. Gantt Charts

6. Project management techniques

7. Prototyping

8. Information gathering techniques (observation, interview, document analysis, visualization, etc.)

9. Forms

10. Workbench technology (CASE tools).

Reference:

Waites and Knott (1992) Chapter 21, pp.267-271.

Waites and Knott (1992) Chapter 18, pp.246-256.

Whitten et al (1989) Chapter A and B, pp-706-765

Whitten et al (1989) Chapter 18, pp.626-650.

LESSON 6: FEASIBILITY STUDY

Subtopics

1. What is feasibility?, feasibility analysis?
2. Importance of feasibility analysis
3. Economic feasibility
4. Operational feasibility
5. Technical feasibility
6. Feasibility Reports

Reference:

Waites and Knott (1992) Chapter 17, pp.241-245.

Whitten et al (1989) Chapter D, pp.766-787.

LESSON 7: ANALYSIS AND DESIGN (CONCEPTUAL AND DETAIL)

Subtopics

1. Information requirement analysis
2. Nature of designs
- 3 Design objectives and principles
4. Conceptual design
5. Detail Design
 - a) Output design
 - b) Input design
 - c) File and database design
 - d) Process design

Reference:

Waites and Knott (1992) Chapter 18-19 and 22-25, pp-2A6-263, 273-379 (skim through).

Andrews et al. (1986) Chapter 7, pp. 184-209.

Nash and Roberts (1984) Chapter 14, pp.305-318.

Schuitheis and Sumner (1992) Chapter 17, pp.674-742.

LESSON 8: IMPLEMENTATION

Subtopics

- 1 Software Acquisition
2. Hardware Acquisition
3. File conversion
4. System testing
- 5 Staff Training
6. Conversion (direct, parallel, phased, pilot)
- 7 Documentation

Reference:

Waites and Knott (1992) Chapter 20, pp.264-266.

Andrews et al (1986), Chapter 8, pp.210-228.

Nash and Robert (1984) Chapter 14, pp.322-324.

Schuitheis and Sumner (1992) Chapter 17, pp.742-750.

LESSON 9: MAINTENANCE AND EVALUATION

Subtopics

1. Need for IS maintenance
2. Need for IS evaluation
- 3 End user satisfaction
4. Productivity
- 5 Systems Quality
6. Accounting evaluations
7. Other methods

Reference:

Mbamba (1999)

LESSON 10: OTHER INFORMATION SYSTEMS DEVELOPMENT TOOLS

Subtopics

1. CASE Tools
2. Prototyping Methodology
3. Business Process Reengineering
4. Packaging
5. End User Computing

Reference:

Schultheis and Sumner (1992) Chapter 17, pp750-758.

Schultheis and Sumner (1992) Chapter 19, pp.825-829.

Waites and Knott (1992), Chapter 21, pp.267-272.

LESSON 11: SYSTEMS CONTROLS SUBTOPICS

1. Control
2. Processing systems
3. Validating
4. Auditing
5. Security

Reference:

Waites and Knott (1992) Chapter 24, pp.294-310.

Whitten et al (1989), Chapter 18, pp.611-650.

LESSON 12: OTHER INFORMATION SYSTEMS**Subtopics**

1. Decision support systems
 - a) Decision making concept
 - b) Decision support system versus management information systems
 - c) Decision support model
2. Executive support systems
3. Expert Systems
4. Group support systems

Reference

McLeod (1986), Chapter 9-15, pp.335-678 (skim through introduction parts only).

Schultheis and Sumner (1992) Chapter 13, pp552-589.

Waites and Knott (1992), Chapter 31, pp.525-531.

References

All these textbooks are available at the Open University Libraries in all centres. The list is not exhaustive and candidates are strongly urged to read as many textbooks as possible. They should-be preferably better versions.

Andrews, L, Thomason, A.J. and Fujimoto, M.J. (1986): The Art of Using computers, Data Processing management Association, Boston.

Koory, J.L. and Medley, D.B. (1987): Management Information Systems: Planning and Decision Making, South Western Publishing Company, Cincinnati.

Mbamba, U.O.L. (1999), "Information Systems Evaluation, A paper presented in the International Conference on African Entrepreneurship and Small Business Development, White Sands, Dares Salaam, Tanzania.

McLeod, R. (1986): Management Information systems, 3 edition, science and Research Associates, Chicago.

Nash F.J. and Roberts B.R. (1984); Accounting Information Systems, MacMillan, New York.

Schultheis, R. and Sumner, M. (1992), Management Information Systems: The Manager's View, 2nd Edition, Illinois.

Waites, N. and Knott, G. (1992): Computing, Business Education Publishers Limited.
Whitten, J.L., Bentley, L.D. and Barlow, V.M. (1989): Systems Analysis and Design Methods, 2nd Edition, Irwin, Boston.

Course Evaluation

2 assignment@ 15 marks (7.5 for each assignment)

2tests@25 marks (12.5 for each test)

1 final examination 60

Total 100

ALL THE BEST