NEW ZEALAND INSTITUTES OF TECHNOLOGY AND POLYTECHNIC QUALIFICATIONS IN INFORMATION & COMMUNICATIONS TECHNOLOGY

PRESCRIPTION: BA600 BUSINESS ANALYSIS

AIM OF MODULE:	To give students an understanding of business organisations, their data requirements, and the relationship between the two, specifically dealing with the business as a system and the MIS as a model of that system.
CREDITS:	7
STUDENT LEARNING HOURS:	70
CONTENT REVISED:	Pre 1996
PRESCRIPTION EXPIRY DATE:	Nov 2011

Level and Assessment Schedule

TOPICS	R	C	A	P	Suggested Assessment Percentage
1. Systems Theory		*			25
2. Conceptual Models			*		40
3. System Development Cycle				*	35
					100

LEARNING OUTCOMES

The student will:

A   1   Demonstrate an understanding of the systemic relationship between a business and its data.

A   2   Perform simple analyses of business structures and derive data models of those structures.

A   3   Demonstrate an understanding of the differences between Executive Information Systems (EIS), Transaction Processing Systems (TPS), Management Information Systems (MIS) and Decision Support Systems (DSS).

CONTENT

1   SYSTEMS THEORY

1.1   General Systems Theory
-   Open systems relying on external inputs, contributing to environment
-   Closed systems, balanced inputs and outputs

1.2   Systems Model of the Firm
-   The firm as an energetic input-output system
-   Networks of resource flows and industrial dynamics
-   Management and organisation as systems

1.3   Models of Systems

1.4   Types of Models
-   Physical
-   Narrative
-   Graphical
-   Mathematical

1.5   Modelling Physical Systems
-   Material Flows
-   Personnel Flow
-   Mechanism Flows
-   Financial Flows

2   CONCEPTUAL MODELS

2.1   Feedback in Systems

2.2   Input, Transformation, Output and Control - Management as a controlling factor.

2.3 Including Information Processing as a function of the model

2.4 Deriving the conceptual model from the physical model

2.5 Using the conceptual model to identify information needs in the firm.

2.6 Analysis of the Firm in the Systems Context.

2.6.1 The general systems approach to business problem solving:
- Defining the Problem
- Gathering data to describe the problem
- Identifying alternative solutions
- Evaluating the alternatives
- Selecting the best alternative
- Implementing the solution
- Following up to ensure the solution has the desired effect

2.7 The firm as an open system.

2.8 Identify the subsystems which make up the firm.

2.9 Reduce the firm to a model based on the information which identifies each subsystem.

3 **THE SYSTEM DEVELOPMENT CYCLE.**

3.1 Definition of the terms EIS, TPS, MIS and DSS and their relationships to each other.

3.2 Levels at which each is appropriate

3.3 Relationship of each to a particular function level within the firm.

3.4 The systems development cycle as a form of the systems approach to business information problem solving.

ASSESSMENT

➢ Simple project work based on case studies.