

University of Mosul

College of Art

Dept. of information and knowledge Techniques



Course Name: Introduction to Information Science

First / Stage

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School Study: 2025-2026

Introduction to Library and Information Science

Library and Information Science (LIS) is a field that aims to provide the right information to the right user at the right time and in the right amount. This field has evolved over time, from a focus on administrative procedures and technical systems to a broader focus on information management and dissemination.

Definition of Information Science

Information Science is the study of the lifecycle of information, from production to retrieval, including storage, organization, and provision of information to users. It is a field that links and mediates between various sciences.

Libraries as Institutions

Libraries are essential institutions for collecting and storing information, and they play a vital role in education, research, and community development.

Types of Libraries

There are several types of libraries, including:

Public Libraries: Provide access to information and cultural resources for the general public.

Academic Libraries: Support the research and learning needs of students and faculty in higher education institutions.

School Libraries: Provide resources and services to support the educational needs of students and teachers in schools.

Digital Libraries: Provide access to digital resources and services through the internet.

Importance of Information in Society

Information plays a vital role in social, economic, and cultural development, and libraries are essential institutions for providing access to information.

Library Services

Libraries offer a range of services, including:

Circulation Services: Providing access to library materials.

Reference Services: Assisting users in finding information and answering research questions.

Information Services: Providing access to databases, online resources, and other information services.

Relationship between LIS and Other Fields

LIS is related to various fields, including:

Psychology: Understanding user behavior and information needs.

Statistics: Analyzing data to understand library usage and user demographics.

Electronics: Using technology to manage and provide access to information.

Education: Supporting learning and research needs of students and faculty.

Fields of LIS

The fields of LIS include:

Information Production: Publishing and creating information resources.

Collection Development: Acquiring and managing library materials.

Technical Processing: Organizing and maintaining library collections.

Library Services: Providing access to library materials and services.

Management and Organization: Managing library operations and services.

Data, Information, Knowledge, and Wisdom

The relationship between data, information, knowledge, and wisdom can be understood as follows:

Data: Raw, unprocessed facts.

Information: Organized and processed data that conveys meaning.

Knowledge: The application and understanding of information.

Wisdom: The highest level of knowledge, based on experience and sound judgment.

The Difference Between Information, Data, Knowledge, and Wisdom

Data:

Data is raw, unorganized facts, similar to raw material that needs to be processed. Data is like scattered LEGO pieces, which in and of themselves have no meaning or utility.

Information:

Information is organized and processed data that carries a specific meaning and utility. It is the result of arranging and assembling LEGO pieces to form meaningful shapes.

How does data become information?

Data becomes information when we organize, analyze, and interpret it within a specific context.

Knowledge:

Knowledge is the result of applying, understanding, and using information in a practical and effective way. It is the stage at which we grasp the complete picture formed by the LEGO model.

The Difference Between Knowledge and Information:

Information

Information is merely a description of things, while knowledge is an understanding of how and why those things work.

Wisdom:

Wisdom is the pinnacle of enlightened knowledge based on experience and sound judgment. This is the stage where we become capable of building new and innovative LEGO models.

The Ladder of Knowledge:

To understand the relationship between data, information, knowledge, and wisdom more deeply, we can visualize these concepts in the form of a Ladder of Knowledge. This ladder consists of four rungs, each representing a level of understanding.

The Importance of the Ladder of Knowledge:

The Ladder of Knowledge helps us understand the interconnectedness between these concepts and illustrates how we gradually build our understanding of the world around us.