

LIS - 621: Digital Library Systems

(4 Credits/100 Marks)

Course Description:

This course will enable students to learn the functioning of digital libraries with respect to the services that are provided online for the users of the library.

Course Objectives:

To know what a digital library is and its functionalities.

To ascertain the process of digitization and the equipment requirements.

To study in detail the open-source digital library software.

To create an awareness on management of digital resources.

Course Outline

Unit - I: Digital Library 15 Hours

Digital Library - Concept and Definition, Characteristics, Need for Digital Libraries, Online databases and Information Retrieval Systems (IRS), Digital Knowledge Organisation, Digital Library Services, Search Interfaces, Digital Library Software.

Unit - II: Digital Library Architecture 12 Hours

Digital Library Architecture, Interoperability, Compatibility - Protocols and Standards. Born digital, Hosting platforms – Self hosting, Mirrored hosting/shared services. DOI, Open URL, CrossRef.

Unit - III: Digitization 18 Hours

Digitization – Definition, Process of digitization, Problems and Challenges of Digital Preservation, Digital Preservation Strategies, Metadata Harvesting, OAI-PMH, Digital Rights Management (DRM) and Digital Preservation, Major Digital Preservation Programmes, Digital Preservation Initiatives in India, Archival Management.

Unit - IV: Open Access Initiatives 15 Hours

Open Access Movement, Digital Library Software: Case study of digitization projects

Study of selected Digital Libraries: NDLI, NzDL.

Learning Outcome:

At the end of this course the students will learn different new ways and means of managing and handling web enabled activities such as Website management, LMS operations, IR management etc.

References / Readings:

1. Andrew, C. (2010). *Introduction to digital library management*. London: Facet Publishing.
2. Chowdhury, G. G. (2003). *Introduction to Digital Libraries*. London: Facet Publishing.
3. Ganguly, R. C. (2007). *Digital libraries: Challenges and prospects*. New Delhi: Isha Books.
4. Jones, R. e. (2006). *The institutional repository*. Oxford: Chandos Publishing.
5. Lawson, N. (2018). *Digital Library Preservation Strategies*. United Kingdom: EDTECH.
6. Purcell, A. (2016). *Digital library programs for libraries and archives: Developing, managing, and sustaining unique digital collections*. Massachusetts: MIT Press.
7. Rajasekaran, K. (2010). *Digital library basics: a practical guide*. New Delhi: Ess Ess Publications.
8. Richard, J. (2006). *The institutional repository*. Oxford: Chandos Publishing.
9. Singh, R. S. (2008). *Encyclopaedia of digital libraries*. New Delhi: Anmol Publishers.
10. Witten, L. H., Bainbridge, D., Nichols, D. M., & Fox, E. A. (2010). *How to build a digital library* (English ed.). Amsterdam: Elsevier.