

**THE ISLAMIA UNIVERSITY OF BAHAWALPUR**  
**DEPARTMENT OF LIBRARY & INFORMATION SCIENCE**

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**COURSE OUTLINE**

**SPRING SEMESTER 2020**

Course Title: Digital Libraries: Theory & Application  
Course Code: LISC-33204 (M.PHIL 2<sup>nd</sup> Semester)  
Credit Hours: 3

Instructor: DR. SHAKEEL AHMAD KHAN  
Email: [shakeelkhan575@gmail.com](mailto:shakeelkhan575@gmail.com)  
Contact # 03006823415

**COURSE DESCRIPTION & OBJECTIVES**

**Course Description:**

1. Basic Concepts: Digital, Virtual, Electronic, Automated, Hybrid Libraries
2. Scope of Digital Library
3. Advantages & Disadvantages of Digital Libraries
4. Effective Proposal Writing for Digital Library Development
5. Intellectual Property Rights
6. Metadata & Standards
7. Dublin Core
8. Information Retrieval Protocol Z39.50
9. Digitization Procedure/Use of Scanner
10. Introduction to Digital Library Software
11. Practice Based Training: Digital Library Software
12. Access to Digital Library
13. Digital Collection Development
14. Future of Digital Libraries& Digital Library Services
15. Issues Related to Digital Library Development
16. Digital Competencies for Developing & Managing Digital Libraries
17. Barriers in Developing Digital Skills
18. Practical Solutions to Overcome the Barriers

**Objectives:**

1. To equip students with digital library development techniques and procedure to successfully work in digital library environment.

## Recommended Readings

1. Chaudhary, G.G & Chowdhary, S. (2003). *Introduction to digital libraries*. London: Facet.
2. Witten, I. H. Bainbridge, D., Nichols, D. M. (2010). *How to build a digital library*. USA: Morgan Kauffman Publishers.
3. Theng, Y.L. and Foo, S. (2005). *Design and usability of digital libraries: Case study of Asia Pacific*. London: Information Science Publishing.
4. Earnshaw, R. Vince, J. ed. (2008). *Digital convergence- Libraries of the future*. London: Springer Verlag London Limited.

## Course Schedule& Description of Topics

Session No.	Description of Topic	
1	History of Digital Library Development Role of Nation Science Foundation Project Guttenberg Development of World Digital Library	
2	Basic Concepts & Discussion on Various Types of Libraries Virtual Library/Harvested Electronic Library Automated Library Hybrid Library Digital Library Stand-alone DL Federated DL	
3	Scope of Digital Library: Collection of Services Collection of Digital Objects It Supports Users in Dealing with these Objects Organization & Presentation of those Objects Available Directly OR Indirectly Accessible Via Digital Means	
4	Advantages of Digital Library Time saving Searching capabilities Easy access Multiple user Round the clock availability	
5	Disadvantages of Digital Library High cost Technology maintenance Copyright issue Technology obsolescence	

	Sustainability	
6	Effective Proposal Writing for Digital Library Development Title of Page Table of Contents Abstract Introduction Statement of Needs Goals/Outcomes6 Work Plan Budget Evaluation Sustainability Promotion Strategies	
7	Infrastructure for Developing Digital Library Software Requirements Hardware Requirements Over all Technological Infrastructure Staff Trainings	
8	Challenges for Developing DL Digitizing Analogue Material Developing Retrieval Tools, Interoperability, Sustainability, Intellectual Property, Effective Access	
9	Designing Principle for DL by Arms (2000) Technical Framework Legal Framework, Standards & Terminologies, Names & Identifiers, Stored Objects	
	<b>Mid Term Exams</b>	
10	Digital Collection Development Selection of Material Digitization, Scanning Process, OCR,	
11	Copyrights for Digital Material Intellectual Property Types of Intellectual Property IPO of Pakistan World Intellectual Property Organization (WIPO)	
12	Information Retrieval Standard: Z39.50 Protocol	
13	Introduction to Digital Library Software: Free & Open Source: Greenstone DLS DSpace DLS E-print DLS Fedora DLS	
14	Commercial Available Software CONTENTdm LUNA	

15	Digital Storage Devices RAM Internal Hardisk External Hardisk, Optical Storage, Compact Disks Digital Versatile Disk, Digital Audio Tape, Optical Disk	
16	Metadata Standards Role of Metadata in Digital Libraries Characteristics of Metadata Creating Quality Metadata	
17	Dublin Core Metadata Standards Elements of Dublin Core	
18	Digital Competencies for Developing & Managing Digital Libraries Digital Skills & Digital Competencies Digital Competencies for Developing DL Digital Competencies for Managing DL	
	<b>Final Term Exam</b>	

**Sessional: 20 Marks**