

**DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE**  
**University of Kerala**

**Master of Library and Information Science (2 year)**

**Objectives of the Programme**

The major objective of the programme is to produce professionals who understand relevant theoretical and practice-oriented aspects of the field of Library and Information Science including:

- the ability to identify, select and provide access to information in a variety of formats;
- the ability to identify the needs of particular user groups and develop collections, services, programs and policies to meet these needs;
- the ability to apply a wide range of electronic resources, and techniques for effective information retrieval;
- the ability to analyze relevant information resources and published research to form valid and well-grounded conclusions;
- the ability to apply appropriate research methodologies to issues and professional concerns in LIS;
- the conceptualization, employment, evaluation and use of appropriate technologies in library and information-related applications;
- an awareness of contemporary issues in the information workplace,
- a commitment to professional values, standards and ethics;

**Structure of the Programme**

<b>Semester</b>	<b>Course Code</b>	<b>Course Title</b>	<b>Credits</b>
I.	<b><u>Core Course</u></b>		
	LIS-C-411	Foundations of Library and Information Science	3
	LIS-C-412	Principles of Management	3
	LIS-C-413	Knowledge Organization: Library Classification (Theory)	3
	LIS-C-414	Knowledge Organization: Library Classification (Practical)	4
	LIS-C-415	Fundamentals of Information Technology (Practical)	3
	<b><u>Internal Electives</u></b>		
	LIS-E-416	Knowledge Organization: Universal Decimal Classification (Practical)	2
II.	<b><u>Core Course</u></b>		
	LIS-C-421	Information and Communication	3
	LIS-C-422	Information sources	4
	LIS-C-423	Information Products and Services	3
	LIS-C-424	Library and Information Centre Management	4
	LIS-C-425	Cataloguing and Metadata (Theory)	3
	LIS-C-426	Cataloguing and Metadata (Practical)	3
	<b><u>Internal Electives</u></b>		

	LIS-E-427	Intellectual Property Rights	3
III.	<b><u>Core Course</u></b>		
	LIS-C-431	Research Methodology	3
	LIS-C-432	Information Storage and Retrieval	3
	LIS-C-433	Information Technology Application in LIS (Theory)	3
	LIS-C-434	Information Technology Applications in LIS (Practical)	3
	LIS-C-436	Internship	1
	<b><u>Internal Electives</u></b>		
	LIS-E-437	Statistical Methods	3
IV	<b><u>Core Course</u></b>		3
	LIS-C-441	Technical Communication	
	LIS-C-442	Informetrics	2
	LIS-C-443	Digital Libraries	2
	LIS-D-444	Dissertation	4
<b>Extra Departmental Electives</b>			
I	LIS-X-431	Technical Writing	2

**Total Credits: Core courses – 60, Electives – 12**

**DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE  
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**SYLLABI OF M.L.I.Sc. (Library and Information Science) PROGRAMME  
(Starting From 2017 Admission)**

**Semester : I**  
**Course Code : LIS-C-411**  
**Course Title : FOUNDATIONS OF LIBRARY AND INFORMATION SCIENCE**  
**Credits : 3**

**AIM:** To familiarize the students with the philosophy of Librarianship, Laws of Library Science and their implications.

**OBJECTIVES:** To make students aware about the types of libraries and library associations and introduce the concept of resource sharing and library movement.

**COURSE CONTENT**

**MODULE I: Library as a Social Institution**

Social and historical foundations of library; Different types of libraries: their distinguishing features and functions; Role of library in formal and informal education  
The changing concept of librarianship.

**MODULE II: Normative Principles of LIS**

Five Laws of Library Science; Implications of the five laws in library and information activities.

**MODULE III: Library Development**

Development libraries with special reference to India; Library movement of Kerala. Resource sharing and Library Networking.

**MODULE IV: Laws relating to Libraries and Information**

Library legislation: need and essential features' Library legislation in India, Kerala Public Libraries Act; Press and Registration Act and Delivery of Books (Public Libraries) Act and Copyright Act.

**MODULE V: Library and Information Profession**

Attributes of profession; Librarianship as a Profession; Professional ethics; Professional associations and their role: ILA, IASLIC, IATLIS, CILIP, SLA, ALA, ASLIB.  
Professional education and research.

**MODULE VI: Promoters of LIS:**

UNESCO, FID, IFLA, UGC, RRRLF.

## REFERENCES

- Ajaykumar Raval. Handbook of public library system. New Delhi: Discovery Publishing, 2013.
- Anil K Dhiman and Suresh C Sinha. Academic Libraries. New Delhi: Ess Ess Publication, 2002.
- Anil K Dhiman. Handbook of special libraries and librarianship. New Delhi: Ess Ess Publication, 2008.
- Choudhury, G. G. et al. Librarianship: An introduction. London: Facet, 2004.
- Khanna, J. K. Library and society. New Delhi: Ess Ess Publications, 1994.
- Kumar, P. S. G. Library in India Series. New Delhi: B. R. Publishing Corporation, 2008.
- Macdougall, Alan F. and Prytherch, Ray, ed. Handbook of library cooperation. Mumbai: Jaico Publishing, 1997.
- Paslithil, A. Public library movement: Kerala. Delhi: Kalpaz Publications, 2006.
- Ranganathan, S. R. The five laws of Library Science. Bangalore: Sarada Ranganathan Endowment for Library Science, 1988.
- Sharma, S K. Libraries and Society. New Delhi: Ess Ess Publication, 1987.

**Course Code : LIS-C-412**

**Course Title : PRINCIPLES OF MANAGEMENT**

**Credits : 3**

**AIM:** The intention of this paper is to inculcate managerial skills in the students.

**OBJECTIVES:** To introduce students with the concept, history, styles and schools of management thoughts and familiarize students with the concept of HRM, TQM, management of financial resources, change and marketing of library and information services.

## COURSE CONTENT

### **MODULE I -- Schools of Management Thought**

Classical, Neo-classical and Modern management theories; Principles of scientific management; Fayol's principles; Functions of management.

### **MODULE II -- Systems Analysis and Design**

Systems Theory; Open and Closed Systems; Project management Techniques – PERT/ CPM, decision tables; data flow diagram.

### **MODULE III -- Human Resources Management**

Organizational structure; job analysis and description; recruitment, selection and induction; training; performance appraisal; motivation; group dynamics; stress management.

### **MODULE IV -- Financial Resources Management**

Methods of financial estimation; Budgets and Budgeting techniques; Marketing management: Marketing of information services and products.

### **MODULE V -- Quality Management**

TQM, Quality audit; SERVQUAL, ISO 9000 series of Standards;

### **MODULE VI -- Other Realms of Management**

Crisis Management; Change Management; Space Management.

## REFERENCES

- Dougherty, R. M. and Heinritz, F. J. Scientific management of library operations. New York: Scarecrow, 1967.
- Duelling, Thomas N. and Ivancevich, John M. Management: Principles and guidelines. New Delhi: Biztantra, 2003.
- Evans, G. Edward and Alire, Camila A. Management basics for information professionals. 3<sup>rd</sup> ed. London: Facet, 2013.
- Evans, G. Edward G. Management techniques for librarians. 2<sup>nd</sup> ed. New York: Academic Press, 1983.
- Hannagan, Tim. Management: concepts and practices. Ed 5. New Delhi: Pearson, 2014.
- Koontz, Harold and Weirich, Heinz. Essentials of management: An international and leadership perspective. 9<sup>th</sup> ed. New Delhi: Tata McGraw-Hill, 2013.
- Osborne, Larry N and Nakamura, Margaret. System analysis for libraries and information professional. Colorado: Libraries Unlimited, 1999.
- Principles of management. Retrievable from <http://www.saylor.org/site/textbooks/Principles%20of%20Management.pdf>
- Robbins, Stephen P., Coulter, May and Vohra, Neharika. Management, 10<sup>th</sup> ed. Delhi: Pearson, 2010.
- Weirich, Heinz, Cannice, Mark V. and Koontz, Harold. Management: A global, innovative and entrepreneurial perspective. 14<sup>th</sup> ed. New Delhi: McGraw-Hill Education (India), 2013.

**Course Code : LIS-C-413**

**Course Title : KNOWLEDGE ORGANIZATION: LIBRARY CLASSIFICATION  
(THEORY)**

**Credits : 3**

**AIM:** The purpose of this paper is to impart knowledge about theories in knowledge organization.

**OBJECTIVES:** To introduce various concepts and theories in classification and provide knowledge about standard schemes of classification (DDC, UDC, CC and LC).

## COURSE CONTENT

### **MODULE I: Universe of Subjects**

Structure and attributes, modes of formation of subjects.

### **MODULE II : Library Classification**

Library classification and its functions. Enumerative and faceted schemes

### **MODULE III : Mapping of the Universe of Subjects**

Mapping of the Universe of subjects in the major schemes of Library classification (DDC, UDC, CC and LC)

#### **MODULE IV: General Theory of Classification**

Normative Principles for Idea Plane and Verbal Plane; Principles for Helpful Sequence Facet Analysis as used in the CC; Principles for Facet Sequence; Postulational procedure; Devices to form and sharpen isolate numbers

**MODULE V:** Notation system and its functions ; Qualities of a good notation system – Hospitality and Mnemonics ; Zone analysis

#### **MODULE VI : Trends in classification**

Automatic Classification ; Classification in online systems and Web ; Knowledge Organization for Digital Libraries; Ontologies ; Steps in designing a scheme of classification for a micro-subject.

#### **REFERENCES**

Foskett, A. C. Subject approach to information. 5<sup>th</sup> ed. London: Library Association, 1996.

Husain, Shababat. Library Classification: Facets and Analyses. Delhi: B.R. Publishing Corporation, 2004.

Kaula, P. N. A treatise on colon classification. New Delhi: Sterling Publishers, 1985.

Krishan, Kumar. Theory of Classification. 4<sup>th</sup> rev. ed. Delhi: Vikas Publishing House, 1998.

Nath, M. Universe of knowledge and development of subjects. Jaipur: Pointer, 2008.

Rajendra Kumbhar. Library Classification: Trends in the 21st Century. UK: Chandos, 2009.

Ranganathan, S. R. 1962. Elements of Library Classification. 3rd ed. Bombay: Asia Publishing, 1962.

Ranganathan, S. R. Prolegomena to Library Classification. 3<sup>rd</sup> ed. Bangalore: SRELS, 1989.

Satija, M. P. Colon Classification. 7th edition. New Delhi: Sterling, 1993.

Satija, M. P. The theory and practice of the Dewey Decimal Classification System. Oxford: Chandos Publishing, 2007.

**Course Code : LIS-C-414**

**Course Title : KNOWLEDGE ORGANIZATION: LIBRARY CLASSIFICATION (PRACTICAL)**

**Credits : 4**

**AIM:** The purpose of this paper is to provide practice in document classification.

**OBJECTIVES:** To impart knowledge about organization of documents in libraries based on subject, and to impart skills in using DDC and CC.

#### **COURSE CONTENT**

##### **MODULE I -- Dewey Decimal Classification: Basic Subjects**

Familiarization of Main Classes, Subdivisions and Relative Index. Classification of simple specific subjects.

##### **MODULE II -- Dewey Decimal Classification: Complex Subjects**

Complicated titles by applying schedules, tables and 'add ... ' instructions in the Dewey Decimal Classification Ed 22.

### **MODULE III -- Record of Term Work**

Classification of not less than 75 documents, indicating the steps followed. Book Numbers have to be derived using the Cutter table.

### **MODULE IV -- Colon Classification: Basic Subjects**

Familiarization of Main Classes/ Basic Classes and Fundamental categories. Classification of simple specific subjects.

### **MODULE V -- Colon Classification: Complex Subjects**

Classification of complicated titles covering all the Main Classes, Facets, Common Isolates, Phase relation and the Devices in the Colon Classification Ed 6 (Reprint).

### **MODULE VI -- Record of Term Work**

Classification of not less than 75 documents, of simple and complicated specific subjects, applying the Postulational Procedure. Book Numbers have to be derived using the Facet Formula prescribed in CC.

### **REFERENCES**

- Kumar, P.S.G. Practical Guide to Colon Classification: 6<sup>th</sup> ed. Agra: Associated Publishing House, 2010.
- Raju, A.A.N. Colon Classification Theory and Practice: Self Instructional Manual. New Delhi: Ess Ess Publication, 2011.
- Ranganathan, S. R. Colon Classification. New Delhi: Ess Ess Publications, 2006.
- Sagar, R. New Concepts of Practical Colon Classification. New Delhi: Ess Ess Publications, 2003.
- Satija, M. P. A Guide to Theory and Practice of Colon Classification. New Delhi: Ess Ess Publications, 2011.
- Tiwari, Purushotham. Colon Classification. New Delhi: A.P.H. Publishing Corporation, 2016.

**Course Code : LIS-C-415**

**Course Title : FUNDAMENTALS OF INFORMATION TECHNOLOGY  
(PRACTICAL)**

**Credits : 3**

**AIM:** To provide hands on experience in the use of Application Softwares.

**OBJECTIVES:** To provide knowledge in using operating system (Windows/Linux), and to impart skills in using word processing and spreadsheet packages.

### **COURSE CONTENT**

**MODULE I--** Operating System: Windows

**MODULE II --** Operating System: Linux

**MODULE III --** Word Processing: MS-Word

**MODULE IV--** Word Processing: Open Office Writer

**MODULE V --** Spreadsheet: MS Excel

## **MODULE VI -- Database: MS Access**

### **REFERENCES**

- Burke, J. C. Powerpoint 97 exam guide. Delhi: Prentice -Hall of India, 1998.  
Lee, W-M. Windows 7 up and running. Mumbai: Shroff Publishers and Distributers, 2009.  
Murray, K. Powerpoint 97. Delhi: BPB Publications, 1998.  
Solutions, K. 1. Excel 2010 in simple steps. Delhi: Dreamtech Press Publication, 2012.  
Solutions, K. 1. Word 2010 in simple steps. Delhi: Dreamtech Press Publication, 2011.  
Walkenbach, J. Microsoft excel Bible. New Delhi: Wiley Publication, 2013.

### **Internal Electives**

**Course Code : LIS-C-416**

**Course Title : KNOWLEDGE ORGANIZATION: UNIVERSAL DECIMAL  
CLASSIFICATION (PRACTICAL)**

**Credit : 2**

**AIM:** The purpose of this paper is to provide practice in document classification

**OBJECTIVES:** To impart knowledge about organization of documents in libraries based on subject and impart skills in using UDC.

### **MODULE I -- Universal Decimal Classification**

Classification of simple and complicated specific subjects, applying the schedules, Common and Special Auxiliaries and other Devices prescribed in the Abridged Edition of the UDC.

Record of Term Work: Classification of not less than 75 documents, indicating the steps followed. Book Numbers have to be derived from the name of author(s).

### **REFERENCES**

Fosket, A. C. Universal Decimal Classification. Clive Bingley, London, 1973.

McIlwaine, I. C. The Universal Decimal Classification: A guide to its use. UDC Consortium, The Hague, Netherlands, 2007.

Universal decimal classification. (Latest Edition). British Standards Institution, London.

**Semester : II**

**Course Code : LIS-C-421**

**Course Title : INFORMATION AND COMMUNICATION**

**Credits : 3**

**AIM:** The intention of this paper is to provide knowledge about information and communication.

**OBJECTIVES:** To introduce students with the concept of information and communication including channels, barriers and models, and to provide knowledge about information society and economics of information.

## **COURSE CONTENT**

### **MODULE I -- Information**

Characteristics, nature, value and uses; Conceptual difference between data, information and knowledge

### **MODULE II – Communication**

Channels – formal and informal; models; barriers, Trends in scientific communication.

### **MODULE III -- Information Science**

Genesis and development; definitions and scope; Information Science as a discipline and its relationship other subjects.

### **MODULE IV -- Library, Information and Society**

Information Society: genesis and characteristics; Intellectual Property Acts; Right to Information Act; Fair use provision, censorship, data security; National policy of information; Open access movement.

### **MODULE V -- Economics of information**

Information industry: generators, providers and intermediaries; Information audit.

### **MODULE VI -- Management of Information**

Information management; Knowledge management.

## **REFERENCES**

- Andal, N. Communication theories and models. Mumbai: Himalaya Publishing House, 2005.
- Bawden, David and Robinson, Lyn. Introduction to Information Science. London: Facet Publishing, 2012.
- Case, Donald O. Looking for information: a survey of research on information seeking, needs and behaviour. 2<sup>nd</sup> ed. Amsterdam: Academic Press, 2007.
- Feather, John. The information society: a study of continuity and change. 5<sup>th</sup> ed. London: Facet Publishing, 2008.
- McGarry, K. J. Changing context of information: an introductory analysis. 2<sup>nd</sup> ed. London: Library Association, 1993.
- McGarry, K. J. Communication, knowledge and librarian. London: Clive Bingley, 1975.
- McQuail, Denis and Windahl, Sven. Communication models for the study of mass communications. London: Longman, 1981.
- Meadows, A. J., ed. Knowledge and communication: essays on the information chain. London: Library Association, 1991.
- Norton, Melanie J. Introductory concepts in Information Science. New Jersey: Information Today, 2008.
- Vickery, Brian C. and Vickery, Alina. Information Science in theory and practice. 3<sup>rd</sup> ed. Munchen: K. G. Saur, 2004.

**Course Code : LIS –C- 422**  
**Course Title : INFORMATION SOURCES**  
**Credits : 4**

**AIM:** To provide knowledge about various information sources

**OBJECTIVES:** To introduce various information sources including primary, secondary and tertiary sources, and to familiarize with reference sources and online databases.

## **COURSE CONTENT**

### **MODULE I – Physical media of information**

Evolution of physical media; Classification of information sources – Print and non-print; Documentary and Non-Documentary; Primary, Secondary and Tertiary Sources of Information -- their categories and characteristics.

### **MODULE II: Ready Reference Sources**

Evaluation Criteria; Detailed Study of dictionaries, encyclopedias, yearbooks, directories, biographical sources, geographical sources, statistical sources, sources of current information.

### **MODULE III: Electronic Information Sources**

Definition, characteristics and types; Information in the Internet – E-books, E-journals, information gateways, table of contents, preprints, discussion forums, technical reports, OPACs, Campus Wide Information Service, ETDs, Patents, reference sources, search tools, subject directories, Courseware, software.

### **MODULE IV: Prominent sources in different subjects**

Abstracting and Indexing periodicals, databases, ready reference sources – dictionaries, encyclopedias, yearbooks, directories, biographical sources, geographical sources, handbooks and manuals and statistical sources.

### **MODULE V: Multimedia & E- resources**

Databases, Portals, Subject Gateways; Open Access Resources

### **MODULE VI: Search Engines, Search Techniques**

Lab. Work on information search & access, Trial Demos

### **Project**

Evaluation of not less than 75 reference sources including electronic sources.

## **REFERENCES**

Cassel, Kay Ann and Hiremath, Uma. Reference information services: An introduction, 3<sup>rd</sup> ed. London: Facet Publishing, 2013.

Hurt, C. D. Information Sources in Science and Technology. 3<sup>rd</sup> ed. Westport, Conn.: Libraries Unlimited, 1998.

Katz, William A. Introduction to reference work, 7<sup>th</sup> ed. New York: McGraw Hill, 1997.

Krishan Kumar. Reference service, 5<sup>th</sup> ed. New Delhi: Vikas Publishing House, 2004.

Ranganathan, S. R. Reference Service. 2nd ed. Bombay: Asia Pub. House, 1961.

Sewa Singh. Handbook of international sources on reference and information. New Delhi: Beacon Books, 2001.

Sewa Singh. Manual of reference and information sources. New Delhi: B R. Publishing, 2004.

Stebbins, Leslie, F. Student guide to research in the digital age: how to locate and evaluate information sources. Santa Barbara: Libraries Unlimited, 2005

Valecich, J. Information systems today: Managing the digital world. New Delhi: PHI, 2009.

Webb, William H. et al. Sources of information with social sciences. 3<sup>rd</sup> ed. Chicago: ALA, 1986.

**Course Code : LIS – C- 423**

**Course Title : INFORMATION PRODUCTS AND SERVICES**

**Credits : 3**

**AIM:** The paper aims to provide in-depth knowledge about information services and products.

**OBJECTIVES:** To familiarize students with various information services, information consolidation and repackaging, and to introduce the nature and purpose of reference and other services.

## **COURSE CONTENT**

### **MODULE I: Information Users and their Information Needs**

Categories of information users; Information needs, definition; Types and models; Information seeking behaviour  
User studies, methods, technique and evaluation

### **MODULE II: Introduction to Information Literacy**

**Information:** Characteristics of information; Types of information; Need for Information Literacy; Dimensions of information literacy.

### **MODULE III: Reference Service**

Concept, definition and trends, virtual reference service, examples of electronic reference service; Reference Interview and search techniques.

### **MODULE IV: Information Services and Products**

Information services, concept, definition need and trends, Alerting services – CAS, SDI, technique, evaluation. Bibliographic, Referral, Document Delivery, Referral centres.

### **MODULE V: Personalized Information Services**

Abstracting and Indexing services; Document Delivery Services; Translation, Reprography

## **MODULE VI: Information Systems and their Services**

Study of national, International Systems and Services, NISCAIR, DESIDOC, NASSDOC, SENDOC, UNISIST, AGRIS, MEDLARS, OCLC

### **REFERENCES**

- Bopp, Richard E. and Smith, Linda C. Reference and information services: An introduction, 4<sup>th</sup> ed. Libraries Unlimited, 2011.
- Cassell,, Kay Ann and Uma Hiremath. Reference and Information Services: An introduction, 3<sup>rd</sup> ed, Chicago: ALA, 2013.
- Gurdev Singh. Information Sources, Services and Systems. New Delhi: PHI Learning, 2013.
- Hurt, C.D. Information Sources in Science and Technology. 3rd ed. Westport Conn.: Libraries Unlimited, 1998
- Katz, William A. Reference and information services: A reader for the nineties. London: Scarecrow Press, 1986.
- Krishan Kumar. Reference Service, 5<sup>th</sup> ed. New Delhi: Vikas Publishing House, 2004.
- Ranganathan, S. R. Reference service. 2<sup>nd</sup> ed. Bombay: Asia Pub. House, 1961
- Rastogi, K.G. Reference services in Library Science. New Delhi: Alfa Publications, 2006.
- Stebbins, Leslie F. Student guide to research in the digital age: how to locate and evaluate information sources. Santa Barbara: Libraries Unlimited, 2005.
- Valecich, J. Information systems today: Managing the digital world. New Delhi: PHI, 2009.

**Course Code: LIS –C- 424**

**Course Title : LIBRARY AND INFORMATION CENTRE MANAGEMENT**

**Credits : 4**

**AIM:** The intention of this paper is to prepare students to carry out library house-keeping operations.

**OBJECTIVES:** To train students in selecting and acquiring of documents, and to teach the practices of accessioning, circulation and maintenance of documents.

### **COURSE CONTENT**

#### **MODULE I: Library Planning**

Concept, definition, need and purpose; Policies, Objectives and Procedures; Library Organizational Structure.

#### **MODULE II: Library House Keeping Operations: Technical Operations**

Different sections of library and information centres and their functions. Collection development: Acquisition procedures: selection, ordering, accessioning and stock editing. Technical processing: Classification, Cataloguing and physical processing.

#### **MODULE III: Library House Keeping Operations: Reader's services**

Maintenance of documents: work with new, returned, damaged and lost documents. Stock verification, binding, care, preservation and restoration of print and electronic documents. Circulation control: Charging systems, interlibrary lending. Serials control: Selection, ordering, receipt and display. Special collections

**MODULE IV: Library Finance**

Sources of Finance; Library Budget, Budgeting and Accounting

**MODULE V: Library Building**

Building: Lay out and space estimation; Furniture and equipment

**MODULE VI: Library Records and Statistics**

Library rules; Staff Manual; Library Statistics. Types of Report: Annual report, Progress / Review reports.

**REFERENCES**

Bryson, Jo. Effective library and information centre management. Hampshire, U. K.: Gower, 1990.

Bryson, Jo. Managing information services: A transformational approach. 2<sup>nd</sup> ed. Aldershot, UK: Ashgate Publishing, 2006.

Bowden, David and Robinson, Lyn. Introduction to Information Science. London: Facet Publishing, 2012.

Corrall, Sheila and Brewerton, Antony. The new professionals handbook: Your guide to information services management. London: Library Association, 1999.

Evans, G. Edward G. Management techniques for librarians. 2<sup>nd</sup> ed. New York: Academic Press, 1983.

Evans, G. Edward and Aire, Camila A. Management basics for information professionals. 3<sup>rd</sup> ed. London: Facet, 2013.

Khanna, J. K. Handbook of library administration. New Delhi: Crest Publishing House, 2001.

Mittal, R. L. Library administration: Theory and Practice. 5<sup>th</sup> ed. New Delhi: Ess Ess Publications, 2007.

Ranganathan, S. R. Library administration. New Delhi: Ess Ess Publications, 2006.

Stueart, Robert D. and Moran, Barbara B. Library and Information Centre Management. Colorado: Libraries Unlimited, 2004.

**Course Code: LIS-C-425**

**Course Title: CATALOGUING AND METADATA (THEORY)**

**Credits: 3**

**AIM:** The purpose of this paper is to impart knowledge about theories and practices document description and cataloguing.

**OBJECTIVES:** To introduce various concepts and theories in cataloguing, and to provide knowledge about various standards in document description and bibliographic exchange.

**COURSE CONTENT****MODULE I: Bibliographic Items**

Bibliographic record and its structure and functions ; Different kinds of bibliographic files; FRBR; Library catalogue and its functions; Classified and Dictionary Catalogues; OPACs

## **MODULE II: Bibliographic Description**

Principles of Description; Standards for Description: ISBDs, AACR-2, RDA.  
Bibliographic Record Formats – ISO 2709 and the MARC family of Formats, MARC XML.

## **MODULE III: Subject Indexing**

Problems in subject search and retrieval ; vocabulary control; Thesauri

## **MODULE IV: General Theory of Subject Indexing Languages**

(SIL) of G. Bhattacharyya

## **MODULE V: Indexing Systems**

Lists of Subject Headings, Chain Indexing, PRECIS, POPSI; Automatic Indexing ;  
Natural language indexing

## **MODULE IV: Metadata**

Types of metadata and their functions ; metadata standards: Dublin Core, EAD

## **REFERENCES**

Aswal, R. S. MARC - 21: Cataloguing format for 21st century. New Delhi: Ess Ess Publications, 2004.

Bowman J. H. Essential cataloguing. London: Facet Publishing, 2003.

Foulonneu, M. Metadata for Digital Resources. Oxford, UK: Chandos, 2008.

Girja Kumar and Krishan Kumar. Theory of cataloguing. Rev. Ed.5. New Delhi: South Asia Books, 1983.

Read, J. Cataloguing without tears: managing knowledge in the information society. Oxford: Chandos Publishing, 2003.

Sangma, S. K. AACR 2 with MARC 21: Cataloguing Practice. New Delhi: Centrum Press, 2012.

Sangma S. K. Cataloguing rules in Library science. New Delhi: Centrum Press, 2013.

Smiraglia, R. P. Metadata: A Cataloger's Primer. USA: Haworth, 2005.

Srivastava, M .D. 2011. Metadata Creation in Digital Libraries. New Delhi: Pacific, 2011.

Taylor, A. G. and Miller, David P. Wynar's introduction to cataloging and Classification. Ed.10. London: Libraries Unlimited, 2006.

## **Codes / Standards**

Anglo-American Cataloging Rules (most recent edition to be used)

Dublin Core and other relevant metadata standards for different kinds of objects /  
resources Library of Congress Subject Headings

MARC 21 and related standards for bibliographic records

OCLC. 2002. Bibliographic formats and standards. 3rd ed. Dublin, Ohio: OCLC  
(Also available online at <http://www.oclc.org/oclc/bib/toc.htm>)

Ranganathan, S. R. Classified Catalogue Code, etc. 5th ed. Bangalore: SRELS, 1964  
Sears List of Subject Headings

**Course Code : LIS-C-426**  
**Course Title : CATALOGUING AND METADATA (PRACTICAL)**  
**Credits : 3**

**AIM:** The purpose of this paper is to provide practice in document cataloguing.

**OBJECTIVES:** To impart skills in cataloguing documents using AACR II R and CCC, and to provide knowledge about coding of data elements in bibliographic description using MARC 21 format.

## **COURSE CONTENT**

### **MODULE I: Bibliographic Description**

Preparation of bibliographic description of books, periodical publications and E-resources as per ISBD and AACR2R.

Coding of data elements in bibliographic description using MARC21 format.

### **MODULE II: Access Points**

Choice and Rendering of access points for works of personal authorship, mixed responsibility, corporate publications, pseudonymous works and anonymous works for both Classified catalogue and Dictionary catalogues as per the rules in AACR2R. Formulation and rendering of subject access points using Chain Indexing for Classified Catalogue and Sears List of Subject Headings for a Dictionary Catalogue.

Records of Term Work :

1. Sample catalogue (both Classified Catalogue and Dictionary Catalogue) of not less than 50 documents prepared in the card form.
2. MARC coded sheets for the above documents and their database prepared in WINISIS
3. Metadata of 25 items prepared in Dublin Core

**Course Code : LIS-E-427**  
**Course Title : INTELLECTUAL PROPERTY RIGHTS**  
**Credits : 3**

**AIM:** To acquire specialized knowledge of law and practice relating to intellectual property.

**OBJECTIVES:** To understand various concepts in Intellectual Property Rights including scope and international treaties, and to provide knowledge of IPR implied in digital environment.

## **COURSE CONTENT**

### **MODULE I: Intellectual Property Rights**

Meaning and scope; areas of application

## **MODULE II: International Treaties on IPR**

Berne Convention; Universal Copyright Convention; Stockholm Conference; Paris Conference; WIPO Copyright treaty; GATT; TRIPS.

## **MODULE III: Copyright Law of India**

Copyright law of India and its amendments.

## **MODULE IV: Patent Law of India**

Patent law of India and amendments.

## **MODULE V: Other Laws related to IPR**

## **MODULE IV: Implications of IPR**

Protection of web-based content; Copyright and libraries; Copy left movement; Creative Commons; Plagiarism.

## **REFERENCES**

- Bainbridge, D.I. Intellectual Property Rights. 9<sup>th</sup> ed. New Delhi : Pearson Education Ltd. 2012
- Elizabeth Verkey. Intellectual Property Rights. Lucknow: EBC Publishing. 2015
- Frederiksen, L. The Copyright Librarian: A Practical Handbook. USA: Chandos Publishing. 2016
- Gopalakrishnan, N.S. and Ajitha, T.G. Principles of Intellectual Property Rights. 2<sup>nd</sup> ed. Lucknow: EBC Publishing. 2009
- Norman Sandy. Practical Copyright for Information Professionals. London: Facet Publishing. 2004.
- Pedley, Paul. Digital Copyright. London: Facet Publishing. 2007
- Puspalatha Srivastava. Copyright Act and digital Millennium Act. New Delhi: EssEss Publication. 2015
- Rajendran, S. Copyright, Copy Left and Library. Thiruvananthapuram: Sree Viswayogi Publication, 2017
- Satarkar, S.P. Intellectual Property Rights and copyright. New Delhi: EssEss Publication. 2003
- Sreenivasulu, N.S. Intellectual Property Rights. New Delhi: Regal Publication. 2011
- Stim, Richard. Intellectual Property: Patents, Trademarks & copyright. 2<sup>nd</sup> ed. New Delhi: Cengage Learning.

**Semester : III**

**Course Code : LIS-C-431**

**Course Title : RESEARCH METHODOLOGY**

**Credits : 3**

**AIM:** The aim of this paper is to develop research skills in students and enable them to carry out research in Library & Information Science.

**OBJECTIVES:** To give an advanced exposure to the students about the research, to develop acquaintance with intensive techniques and skills of research process, and to familiarize the art and style of writing a research report.

## **COURSE CONTENT**

### **MODULE I: Research**

Concept, meaning, need and process of research. Types of research: fundamental and applied including interdisciplinary and multidisciplinary approach; Research and development of scholarship.

### **MODULE II: Research Design**

Conceptualization and operationalization; Types of research design; Identification and formulation of problem; Hypothesis; nominal and operational definition; Designing research proposal; Ethical aspects of research; Literature search: print, non-print and electronic sources; Literature Review.

### **MODULE III: Research Methods**

Scientific method; Historical method; Descriptive method; Survey method and case study method; Experimental method and Delphi method; Brainstorming method.

### **MODULE IV: Research Techniques and Tools**

Observation; Questionnaire; Interview; Online research tools; Scales and check lists; Library records and reports; Sampling techniques.

### **MODULE V: Research Reporting**

Structure, style, contents; Guidelines for research reporting; Style manuals; e-citation, Reference management software; Methods of research evaluation.

### **MODULE VI: Recent Trends**

Current Trends in Library and Information Science Research.

## **REFERENCES**

- Alvesson, M. and Skoldberg, K. Reflexive methodology: new vistas in qualitative research. Ed. 2. London: Sage Publication, 2009.
- Busha, Charles T. and Harter, Stephen. P. Research methods in librarianship. New York: Academic Press, 1980.
- Greenfield, T. Research methods: guidance for postgraduates. London: Hodder Arnold, 1996.
- Kothari, C. R. Research methodology. New Delhi: New Age International, 2011.
- Krishan Kumar. Research methods in Library and Information Science. Rev. Ed. 1999. New Delhi: Har-Anand Publications, 1999.
- Kumar, P S G. Research methods and statistical techniques. New Delhi: B. R. Publications, 2004.
- Lancaster, F. W. and Powell, R. R. Basic research methods for librarians. New Jersey: Ablex Publishing, 1995.
- Martyn, John and Lancaster, F. Wilfrid. Investigative methods in library and Information Science: an introduction. Arlington, Virginia: Information Resources Press, 1981.
- Powell, R. R. and Silipigni, C. L. Basic research methods for librarians. Ed. 4. Westport: Libraries Unlimited, 2004.
- Slater, M., ed. Research methods in Library and Information Studies. London: Library Association Publishing, 1990.

**Course Code : LIS-C-432**

**Course Title : INFORMATION STORAGE AND RETRIEVAL**

**Credits : 3**

**AIM:** The aim of the paper is to introduce concepts in information storage and retrieval.

**OBJECTIVES:** To introduce the concept of information storage and retrieval including indexing languages, vocabulary control, search strategies etc., and to familiarize students with information retrieval models and develop skills in designing thesaurus.

## **COURSE CONTENT**

### **MODULE I: Introduction to DBMS**

E-R Models; Relational and OO Database Models, Normalization. SQL, Implementation in MySql or PostgreSql ; integrity and security issues.

### **MODULE II: Information Retrieval**

Basic Concepts and components; Overview of IR systems; IR Models: Boolean, Probabilistic and Vector Processing Models; Bayesian network model; Structured Text Retrieval Models.

### **MODULE III: Information Search**

Searching vs. browsing; dynamic query formulation: keyword based querying, pattern matching, structural queries, query protocols, Hybrid, statistical and knowledge approaches: query expansion.

### **MODULE IV: Evaluation of Information System**

Evaluation of Information Systems: Need for evaluation; Evaluation Criteria; Steps.

### **MODULE V: Evaluation Experiments**

Aslib Cranfield, MEDLARS, SMART and TREC.

### **MODULE VI: Modern Trends in Information retrieval**

## **REFERENCES**

- Baeza –Yates, Ricardo. Modern information retrieval. Delhi: Pearson Education, 1999.
- Choudhury, G. G. and Choudhury, Sudatta. Organizing information from the shelf to the web. London: Facet Publishing, 2007.
- Choudhury, G. G. Introduction to modern information retrieval. 3<sup>rd</sup> ed. London: Facet Publishing, 2010.
- Date, C.J. An Introduction to database systems. Reading, MA: Addison-Wesley, 2000
- Grossman, David A. and Frieder, Ophir. Information retrieval: Algorithms and heuristics. 2<sup>nd</sup> ed. Dordrecht, The Netherlands: Springer, 1998
- Korfhage, Robert R. 1997. Information storage and retrieval. New York: Wiley, 1997.
- Meadow, Charles T., Boyce, Bert R. and Kraft, Donald H. Text information retrieval systems. 2<sup>nd</sup> ed. California: Academic Press, 2000.
- Neelameghan, A. Online database searching and retrieval: Strategies, procedures, commands and problems – A brief guide. Bangalore: SRELS, 1995.
- Silberschatz, A., Korth, H.F. and Sudarshan, S. Database system concepts. 3<sup>rd</sup> ed. New York: McGraw-Hill, 1997.

Van Rijsbergen, C. J. The geometry of information retrieval. Cambridge: Cambridge University Press, 2004.

**Course Code : LIS-C-433**

**Course Title : INFORMATION TECHNOLOGY APPLICATIONS IN LIS  
(THEORY)**

**Credits : 3**

**AIM:** The purpose of this paper is provide knowledge about ICT and its applicability in library and information centers.

**OBJECTIVES:** To introduce concepts such as networks, their types and uses in libraries, internet, etc., to develop skills to plan and implement library automation and to familiarize students with library automation packages, and to familiarize students with Web 2.0 tools and services.

## **COURSE CONTENT**

### **MODULE I: Library Automation**

Planning and implementation; Automation of in-house operations – file requirements for Acquisition, Cataloguing, Circulation control, Serials Control, OPAC. Library Automation packages: KOHA, E-Granthalaya.

### **MODULE II: Communication Technology**

Fundamentals of Telecommunication Technology; media, mode and components Network media, UTP, optical fibre, Ethernet, network interface card, hubs, routers, modem. Network types and topologies: LAN, MAN, WAN, Wireless; Bus, Star, Ring and Token ring; Local area network types and topologies.

### **MODULE III: Internet**

Basic features and tools; Net-based information services. Connectivity: Dial up, Lease line, ISDN, Digital subscriber lines Protocols: FTP, HTTP Web browser: Internet explorer, Mozilla Firefox, Chrome; Web servers, Web tools, Search engines Videoconferencing; Web 2.0 tools and services; Internet security.

## **REFERENCES**

- Arthur, Lowell Jay and Burns, Ted. Unix Shell Programming. New Delhi: Galgotia, 1995.
- Date, C. and Darwen, H. A Guide to the SQL Standard. 3rd ed. Reading, MA: Addison-Wesley, 1994.
- Date, C.J. An Introduction to Database Systems. 7th ed. Boston, MA, USA: Addison-Wesley Longman, 2000.
- Elmasri, Ramez and Navathe, Shamakant B. Fundamentals of Database Systems. 5<sup>th</sup> ed. Boston: Pearson/Addison Wesley, 2007.
- Matthew, Neil et al. Professional Linux Programming. Mumbai: SPD, 2001.
- Rowley, Jennifer. The electronic library. London: Library Association Publishing, 1998.
- Michael, Randal K. Mastering UNIX Shell Scripting. Canada: Robert Ispen, 2003.
- Peterson, Richard. Linux: the Complete Reference. New York: McGraw-Hill, 2006
- Ravichandra Rao. Library automation. New Delhi: Wiley Eastern, 1990.

Williams, Brian K. and Sawyer, Stacey C. Using information technology: A practical introduction to computers & communications, 6<sup>th</sup> ed. New Delhi: Tata McGraw-Hill, 2005.

**Course Code : LIS-C-434**

**Course Title : INFORMATION TECHNOLOGY APPLICATIONS IN LIS  
(PRACTICAL)**

**Credits : 3**

**AIM:** The overall purpose is to provide hands on experience in the use of ICT for providing library and information services.

**OBJECTIVES:** To provide hands on experience in the use of Library Automation package (Koha), to develop skills in web page designing, and to provide hands on experience in the use of Reference Management Softwares.

### **COURSE CONTENT**

**MODULE I: Bibliographic Database Management**  
WINISIS

**MODULE II: Library Automation Package**  
KOHA

**MODULE III: Web Design**

**MODULE IV: Digital Library Software**  
DSpace/Greenstone

**MODULE V: Reference Management Software**  
Zotero, Mendeley

### **REFERENCES**

Adithya Tripathi, Presad H.N&Rajani Mishra. Open source library solutions. New Delhi:Ess ESS Publication, 2010

Brian Austin .Web design. New Delhi: Dreamtech Publication, 2001

Mahendra V Meta. Open source Software in Indian libraries.Jaipur: Yking Books, 2014

Rohith Khurana.Html 4 U. New Delhi: APH Publishing Corporation, 2001

Sue Jenkins. Web Design. New Delhi: Wiley India Publication, 2007

Uma v Suseela v.j .Automation of Library integration operation: A how to do Manuel. New Delhi:Ess ESS Publication ,2017

Vinod Kumar Mishra. Basics of library automation. KOHA library management software and data migration. New Delhi: Ess Ess Publication, 2016

**Course Code : LIS-C-435**

**Course Title : INTERNSHIP**

**Credit : 1**

Duration	-	30 days
Period	-	Preferably between Semester II and III
Place	-	Any Library and Information Centre approved by the Department
Valuation	-	Written Report in the prescribed format certified by the Head of the Library and Information Centre
Prerequisite	-	Attendance Certified by the Head of the LIC

**Course Code : LIS-E-436**

**Course Title : STATISTICAL METHODS**

**Credits : 3**

**AIM:** To make use of various statistical methods in Library and Information Science research.

**OBJECTIVES:** To familiarize with various concepts in statistics, and to apply various statistical tools and techniques for data analysis.

## **COURSE CONTENT**

### **MODULE I: General Introduction**

Functions, applications and limitations of statistics.

### **MODULE II: Collection of Data**

Collection of data: sampling techniques.

### **MODULE III: Summarization of Data**

Tabulation and graphical methods of presentation;

Measures of central tendency: mean, median, mode

Measures of variability: range, percentile, interquartile range, variance, standard deviation.

### **MODULE IV: Data Analysis**

Probability and probability distribution, Normal distribution and Binomial distribution.

### **MODULE V: Testing of Hypotheses**

Chi Square Test, F-Distribution.

Regression, correlation and analysis of variance

Scaling techniques, Association of Variables.

### **MODULE VI: Statistical Packages**

SPSS, IDAMS

## **REFERENCES**

Agarwal, B. L. Basic statistics. New Delhi: New Age International Publishers, 2009.

Gupta, C. B. and Gupta, V. An Introduction to statistical methods. New Delhi: Vikas Publishing House, 2014.

Gupta, K. R. Practical statistics. New Delhi: Atlantic Publishers, 2012.

Gupta, S. C. Fundamentals of statistics. Mumbai: Himalaya Publishing House, 2013.

Gupta, Santhosh. Research methodology and statistical techniques. New Delhi: Deep & Deep Publications, 2010.

Hooda, R. P. Data collection and Sampling: Introduction to statistics, 2005.

Kothari, C. R. and Garg, Gaurav. Research methodology: methods and techniques. New Delhi: New Age International Publishers, 2014.

Pillai, R. S. N. and Bagavathi. Data analysis (Practical). New Delhi: Chand & Company, 2013.

Singh, G. B. Research methodology: Advanced techniques with statistical methods. Jaipur: Paradise Publishers, 2011.

**Semester : IV**

**Course Code : LIS-C-441**

**Course Title : TECHNICAL COMMUNICATION**

**Credits : 3**

**AIM:** To develop and improve communication skills in students.

**OBJECTIVES:** To provide the concepts in technical writing, presentation of information, and to familiarize students with various oral presentation skills.

## **COURSE CONTENT**

### **MODULE I: Communication Process**

Types, Verbal, Non-verbal, Formal, Informal; Types of writing; Technical writing-- Principles, characteristics; Language as a medium for communication, readability; Audience Research

### **MODULE II: Organization, Lay out and Presentation of Information in:**

Learned papers and popular articles, Technical Reports and project proposals, Book design and page layout.

### **MODULE III: Repackaging and Consolidation**

Preparation of trend reports, reviews, State-of- the art report, digest. Abstracts – Types, Preparation, Guidelines

### **MODULE IV: Mechanics of Writing**

Common problems in spelling, grammar, usage and punctuation

### **MODULE V: Style Manuals**

Use of Style manuals – Chicago, APA and MLA; Reference Management Software  
Copy editing and proof reading.

### **MODULE VI: Oral Presentation Skills**

## **REFERENCES**

American Psychological Association. Publication manual of the American Psychological Association, 6<sup>th</sup> ed. Washington DC, The Author, 2010

Anderson, Paul V. Technical communication: A Reader centered approach, 6<sup>th</sup> ed. Australia: Cengage Learning, 2007.

Ashraf Rizvi, M. Effective technical communication. New Delhi: Tata McGraw Hill, 2011.

Chicago Manual of Style: For authors, editors and copywriters, 16<sup>th</sup> ed. New Delhi: PHI, 2010.

Day, Robert A. and Gastel, Barbara. How to write and publish a scientific paper, 7<sup>th</sup> ed. Cambridge, UK: Cambridge University Press, 2012.

Gerson, Sharon J. and Gerson, Steven M. Technical writing: Process and product. 3<sup>rd</sup> ed. New Delhi: Pearson Education, 2000.

Gibaldi, Joseph. MLA Handbook of writers and research papers, ed. 6. New Delhi: Affiliated East West Pvt Ltd, 2004.

Meenakshi Raman and Sangeeta Raman. Technical communication: Principles and practices, 2<sup>nd</sup> ed. New Delhi: Oxford University Press, 2012.

Satish Shah. Recent developments in technical writing. New Delhi: Arise Publishers, 2010.

Sunil Gokhale. Essentials in technical communication. Mumbai: Himalaya Publishing House, 2004.

**Course Code : LIS-C-442**

**Course Title : INFORMETRICS**

**Credits : 2**

**AIM:** To understand how specialists build the discourse pertaining to specific communities through use of language, through writings and through specific communication channels, both formal and informal.

**OBJECTIVES:**

To provide various concepts relating to bibliometrics including laws and applications, and to familiarize with Bibexcel software for bibliometric analysis.

**COURSE CONTENT**

**MODULE I: Overview**

Concepts, Genesis, Definition, Librametry, Bibliometrics, Scientometrics, Informetrics, Webometrics.

**MODULE II: Sources for Informetric Data**

Web of Knowledge, Scopus, Google Scholar, Scimago, Indian Citation Index.

**MODULE III: Bibliometric Laws**

Laws of Bradford, Lotka, Zipf, Brooks, Vickery, Bookstein, Garfield, Price. Informetric models.

**MODULE IV: Bibliometric Applications**

Citation studies, Bibliographic coupling, co-citation analysis, citation index, Aging and Obsolescence.

**MODULE V: Cito-analytical Products**

Cito-analytical products – Journal ranking, Impact factor, Immediacy Index, Cited Half – life, H index.

**MODULE VI: Bibliometric Softwares**

Detailed Study of Bibexcel

**REFERENCES**

Garfield., Eugene. Citation indexing: It's theory and application in science, technology and humanitiy. New York: John Wiley and Sons, 1979.

Egghe,. Leo. Lectures on Informetrics and Scientometrics. Bangalore: SRELS, 2003.

Egghe, Leo and Rousseau, Ronald. Introduction to Informetrics: quantitative methods in library, documentation and information science. Amsterdam: Elsevier Science Publishers, 1990.

Gupta, B M.. .Emerging trends in Scientometrics. Mumbai: Allied, 1999.

Merton, R. K. Sociology of science: Theoretical and empirical investigations. Chicago, University of Chicago Press, 1973.

Narin, F. Evaluative Bibliometrics: The use of publication and citation analysis in the evaluation of scientific activities.. New Jersey, Computer Horizons Inc., 1976.

Sengupta, I. N. Bibliometrics research: Growth of bibliometrics literature, Calcutta: SBA, 1988.

Tiwari, Ashwini. Bibliometrics, Iiformetrics and scientometrics. Delhi: RBSA, 2006.

Vinkler, Peter. he Evaluation of Research by Scientometrics Indicators. UK: Chandos, 2010

Zuckerman, H. Scientific elite: Noble laureates in the United States, New York, Free Press, 1977.

**Course Code : LIS-C-443**

**Course Title : DIGITAL LIBRARIES**

**Credit : 2**

**AIM:** To provide knowledge about various concepts in Digital Libraries.

**OBJECTIVES:** To familiarize the concept of digitization and digital libraries, and to provide knowledge about various digital library softwares and development of digital repositories.

## **COURSE CONTENT**

### **MODULE I : Digital Libraries**

Concept and definition; Historical Development of Digital Libraries.

### **MODULE II: Copyright in DL**

Copyright and license issues.

### **MODULE III: Digitization Process**

Software, Hardware and best practices; Scanners and scanner types; OCR and OCR software.

### **MODULE IV: Technology for DLs**

Open source software; DSpace, GSDL: Features and comparative study of DSpace, E-prints and Fedora.

### **MODULE V: Standards, Protocols and Formats for DL**

Open Standards and File Formats, Harvesting Metadata, OAI-PMH and DL Interoperability; Data curation.

## **MODULE VI: Digital Library Architecture**

Grid architecture; Open URL integration; Digital Preservation: Persistent identifiers: DOI and CNRI Handles; Multilingual digital repositories and Cross-language information retrieval.

### **REFERENCES**

- Andrews, J. Digital libraries. London: Ashgate, 2010.
- Cornish, G. P. Copyright interpreting the law for libraries and archives. London: Library Association, 1990.
- Dahl, Mark et al. 2006. Digital libraries: Integrating content and systems .London: Chandos.
- Fenner, Audrey, ed. Managing digital resources in libraries. New York: Haworth, 2005
- Gopal, K.. Digital libraries in electronic information era. New Delhi: Authors Press, 2000.
- Lesk, Michael. Understanding digital libraries, 2<sup>nd</sup> ed. San Francisco: Morgan Kaufman, 1996.
- Pitkin, G. M, ed.. National electronic library: A guide to the future for library managers. London: Greenwood Press, 1996.
- Tedd, Lucy A. and Large, Andrew. Digital libraries: Principles and practice in a global environment. Munchen, Gernany: K. G. Saur, 2005.
- William, Arms. Digital libraries. New Delhi: Anne, 2005.
- Witten, Ian H. and Bainbridge, David. How to build a digital library. Amsterdam: Morgan Kaufman, 2005.

**Course Code : LIS-D-444**

**Course Title : DISSERTATION**

**Credits : 4**

**AIM:** The aim of the project is to develop skills in using research methods, techniques and tools.

**OBJECTIVES:** Students have to carry out research on a topic approved by the Departmental Council, under the guidance of a faculty member and prepare a dissertation. Appropriate size of the dissertation shall be 100 typed pages in A4 size paper. The students should also appear for a viva-voce.

### **Extra Departmental Electives**

**Course Code : LIS-X-431**

**Course Title : TECHNICAL WRITING**

**Credit : 2**

**AIM:** To develop technical writing skills among students in the field of Library and Information Science.

**OBJECTIVES:** To provide various concepts in technical writing including types and principles, and to familiarize with mechanics of writing such as copy editing and proof reading.

### **COURSE CONTENT**

**MODULE I: Communication Process**

Verbal and non-verbal communication; Different types of writing; Characteristic features of technical writing. Principles of technical writing; Audience recognition and involvement. Pre-writing, writing and rewriting.

## **MODULE II: Organization, lay out and presentation of information**

- Learned papers
- Popular articles
- Technical reports
- Project proposals
- Books

## **MODULE III: Mechanics of Writing**

Common problems in spelling, grammar, usage and punctuation; Use of style manuals; Copy editing; Proof reading; Reference management.

## **REFERENCES**

- Anderson, Paul V. Technical communication: A Reader centered approach, 6<sup>th</sup> ed. Australia: Cengage Learning, 2007.
- Ashraf Rizvi, M. Effective technical communication. New Delhi: Tata McGraw Hill, 2011.
- Chicago Manual of Style: For authors, editors and copywriters, 16<sup>th</sup> ed. New Delhi: PHI, 2010.
- Day, Robert A. and Gastel, Barbara. How to write and publish a scientific paper, 7<sup>th</sup> ed. Cambridge, UK: Cambridge University Press, 2012.
- Gerson, Sharon J. and Gerson, Steven M. Technical writing: Process and product. 3<sup>rd</sup> ed. New Delhi: Pearson Education, 2000.
- Gibaldi, Joseph. MLA Handbook of writers and research papers, ed. 6. New Delhi: Affiliated East West Pvt Ltd, 2004.
- Meenakshi Raman and Sangeeta Raman. Technical communication: Principles and practices, 2<sup>nd</sup> ed. New Delhi: Oxford University Press, 2012.
- Satish Shah. Recent developments in technical writing. New Delhi: Arise Publishers, 2010.
- Sunil Gokhale. Essentials in technical communication. Mumbai: Himalaya Publishing House, 2004.