

**Department of Library and Information Science**  
**Gauhati University, Gopinath Bordoloi Nagar, Guwahati-781014**

Syllabus of  
 Master of Library and Information Science (MLISc) Program  
 (wef August, 2017 from 1<sup>st</sup> Semester only)

*Note: This syllabus is approved in the Committee of Courses and Studies (CCS) Meeting in Library and Information Science (LIS) held on October 24, 2017, Faculty of Art and in the Academic Council, Gauhati University Meeting on October 27, 2017.*

**About the M.L.I.Sc. Program:** The development of the society largely depends on information access, processing, organisation, dissemination and the different types of information services accessible to the citizens. Twentieth first century is the age of information and knowledge and constantly growing number of institutes / organizations that are based on information and knowledge are emerging. The M.L.I.Sc. program will produce required human resources for those information and knowledge based organizations.

**Program Specific Outcomes (PSOs):** After completion of M.L.I.Sc. from Gauhati University, you will be able to:

- Develop skill to manage a Library and Information Centre;
- Organize and facilitate access to information in all forms including printed and digital;
- Develop and provide access to different types of information based services and
- Work as efficient information intermediaries in colleges, universities, industries, banking, railways, and other similar institutions.

**Program Outline:** In the following Course No. column, the first digit indicates the semester, the second and third digit indicates the course number and the fourth digit indicates the credit of the course. Abbreviation (CC) means **Core Course** whereas abbreviation (EC) means **Elective Course** (any one course to be opted by the student) and (OC) means **Open Course** (can be taken by students of other subjects). One credit is equivalent to 30 study hours inclusive of all learning activities.

Course No.	Description	Marks	Internal Assessment	Total Marks	Credit
<b>First Semester</b>					
LIS 1016	Foundations of Library and Information Science	80	20	100	6
LIS 1026	Organization of Knowledge (Theory)	80	20	100	6
	(A) Library Classification	40	10	50	3
	(B) Library Cataloguing	40	10	50	3
LIS 1036	Reference and Information Sources and Services	80	20	100	6
	(A) Reference and Information Sources	40	10	50	3
	(B) Reference and Information Services	40	10	50	3
LIS 1046	Organization of Knowledge (Practice)	80	20	100	6
	(A1) Colon Classification	20	5	25	3
	(A2) Dewey Decimal Classification	20	5	25	
	(B) Library Cataloguing: AACR 2R	40	10	50	3

<b>LIS 1056</b>	Computer Application in LIS	80	20	100	6
<b>Second Semester</b>					
<b>LIS 2016</b>	Management of Library and Information Centres	80	20	100	6
<b>LIS 2023</b>	Information Communication & Information System	40	10	50	3
<b>LIS 2033</b>	System Analysis Design	40	10	50	3
<b>LIS 2043</b>	Preservation & Conservation	40	10	50	3
<b>LIS 2053</b>	Academic Library System (EC)	40	10	50	3
<b>LIS 2063</b>	Public Library System (EC)	40	10	50	3
<b>LIS 2073</b>	Special Library System (EC)	40	10	50	3
<b>LIS 2086</b>	Organization of Knowledge (Practice)	80	20	100	6
	(A) Dewey Decimal Classification	40	10	50	3
	(B) Universal Decimal Classification	40	10	50	3
<b>LIS 2096</b>	ICT Application in Library and Information System	80	20	100	6
<b>Third Semester</b>					
<b>LIS 3016</b>	Research Methodology	80	20	100	6
<b>LIS 3023</b>	Management Information System	40	10	50	3
<b>LIS 3033</b>	Management of E Resources	40	10	50	3
<b>LIS 3043</b>	Web Resources	40	10	50	3
<b>LIS 3053</b>	Bibliometrics & Webometrics	40	10	50	3
<b>LIS 3063</b>	Library Software Packages (Theory)	40	10	50	3
<b>LIS 3073</b>	Documentation Works	50	-	50	3
	(A) Bibliographic Project	20	5	25	3
	(B) Library Visit Report	20	5	25	
<b>LIS 3086</b>	Software Packages (Practice)	100	-	100	6
	(A) CDS/ISIS and WINISIS	40	10	50	3
	(B) SOUL	40	10	50	3
<b>Fourth Semester</b>					
<b>LIS 4016</b>	Information Storage and Retrieval System	80	20	100	6
<b>LIS 4026</b>	Digital Library System (Theory)	80	20	100	6
<b>LIS 4033</b>	Library Users	40	10	50	3
<b>LIS 4043</b>	Internship	50	-	50	3
<b>LIS 4056</b>	Open Sources Software Packages (Practice)	80	20	100	6
	(A) Koha	40	10	50	3
	(B) DSpace	40	10	50	3
<b>LIS 4066</b>	Dissertation	80	20	100	6
<b>Total</b>				<b>2000</b>	<b>120</b>

**LIS-1016: Foundations of Library and Information Science**

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Get acquainted with the services of the library to a variety of information needs of users in different contexts in an information society;
- Trace the progress of libraries and library services in India;
- Make use of the Five Laws as a set of logical principles to initiate any new activity in library, documentation, information work and services;
- Appreciate the contributions of library associations in professional activities; and
- Identify different aspects of resource sharing;

**Detailed Syllabus**

Unit 1: Library: Definition, types, Objectives of different types of libraries; Historical perspective; Need of libraries of different types; Libraries in national development: cultural, economic, political, social, spiritual etc; Librarianship as a profession; Library as a social institution

Unit 2: History of Indian library movement with special reference to NE India; UNESCO: objectives, functions, activities and services; UNESCO public library manifesto

Unit 3: Five laws of Library Science; Implication of five laws in LICs

Unit 4: Library Associations at State, Regional, National and International levels; Objectives, functions and activities of Assam Library Association, ILA, IASLIC, IATLIS, ALA, CILIP, SLA, ASLIB, IFLA.

Unit 5: Library cooperation and Resource sharing; Impact of IT in Resource sharing. Documentation and Information Centres.

**Suggested Readings**

- Barman, Badan (2012). Library and Information Science: UGC NET Guide. Guwahati: DVS Publishers.
- Das, Nabajyoti; Sarma, Utpal & Barman, Badan (2017). Public Librarianship and Glorious Heritage of Karmabir Nabin Chandra Bordoloi Library (Reading Hall): Plan for Renovation and Development. Guwahati: Assam Library Association.
- Dhiman, Anil Kumar & Rani, Yashoda (2005). Learn Library and Society: Learning Library Science Series. New Delhi: Ess Ess Publications.
- Kumar, Krishan (1997). Library Organization. Noida: Vikas Publishing House Pvt. Limited.
- Lahkar, Narendra; Deka, Dipen & Barman, Badan (Eds.) (2017). Comparative Librarianship. Guwahati: Department of Library and Information Science, Gauhati University.
- Ranganathan, Shiyali Ramamrita (2006). The Five Laws of Library Science. New Delhi: Ess Ess Publications.

**LIS 1026 Organization of Knowledge (Theory)**

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Identify and describe the need, purpose and function of library classification;
- Adapt existing normative principles of library service to knowledge resources;
- Describe the structure, identify main classes, notation and characteristic features of a library classification;
- Define and describe a library catalogue;
- Distinguish different approaches of readers for documents; and
- Explain the cataloguing process.

**Detailed Syllabus**

**(A) Library Classification**

Unit 1 Library classification: Meaning, need and purpose; Universe of knowledge: Structure and attributes; Modes of formation of subjects

Unit 2 Normative principles of classification; Brief study of classification schemes: DDC, UDC, LC, CC; Universe of subjects as mapped in major classification schemes

Unit 3 Notation: Definition, structures, quality and function; Trends of library classification

**(B) Library Cataloguing**

Unit 1 Library catalogues: Needs, structures and types; Physical forms of catalogues including OPACs, Web-OPACs, Cataloguing Code: AACR2R, RDA, FRBR; Catalogue entries: Centralize, Cooperative and Union catalogues

Unit 2 Personal Authors, Corporate Authors, Pseudonyms, Anonymous work, Uniform titles, Non-Print Materials; Subject Headings: SLSH, LCSH, Chain procedure

Unit 3 Trends in Library catalogue; Bibliographic standards: ISBD; Data exchange formats: MARC, CCF, ISO 2709, Z39.50, etc; Metadata standards and schemes

**Suggested Readings**

Cham, Lois Mai and others. (1996). Dewey Decimal Classification: A practical guide. New York: Forest Press.

Dewey, Melville (1971). Dewey Decimal Classification and Relative Index. 22nd ed. 4V. New York: Forest Press.

Dhiman, Anil Kumar & Rani, Yashoda (2005). Learn Library Cataloguing: Learning Library Science Series. New Delhi: Ess Ess Publications.

Kumar, Krishan & Garg, B.S. (2005). Advanced Cataloguing Practice: Based on Anglo-American Cataloguing Rules. New Delhi: Har-Anand Publications Pvt. Ltd.

Raju, A.A.N. (1995). Dewey Decimal Classification (DDC 20): Theory and practice: a practical self instructional manual. Madras: T. R. Pub.

Satija, M.P and Comaroni, M.P (1998). Exercises in the 21st Edition of DDC. Revised and Enlarged. New Delhi: Sterling.

**LIS 1036 Reference and Information Sources and Services**

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Describe the structure of different kinds of documentary resources useful and accessible to variety of users;
- Describe the need, use and functions of bibliography;
- Explain the concept of bibliographical control;
- Grasp the process involved in providing reference and information services;
- Enumerate different types of Indexing & Abstracting periodicals with examples; and
- State the process involved in rendering biographical information services.

**Detailed Syllabus****(A) Reference and Information Sources**

Unit 1 Documentary and non-documentary sources; Primary, secondary, tertiary sources; Dictionaries, Encyclopaedia, Almanacs, Yearbook, Directories, Handbook, Manuals, News summaries, Concordances, Biographical and Geographical sources

Unit 2 Bibliographies: National bibliography, Subject bibliography and Union list; Publishers bibliographies; Evaluation of basic reference sources

Unit 3 Bibliographic control: meaning, purpose, initiative at national and international levels; Open Access Initiative; Electronic resources: Offline and Online

**(B) Reference and Information Services**

Unit 1 Reference and information service: Definition, need and scope; Types of reference and information service; Fact finding, literature search; Reference and information service: Public, Academic and Special libraries; Digital reference service

Unit 2 Indexing and abstracting services: Meaning, use and types; Indicative and informative abstracts, content analysis, auto indexing and abstracting

Unit 3 Documentation and bibliographic services, CAS and SDI services, Referral services, Document Delivery Service; Information service through library consortia

**Suggested Readings**

Bopp, Richard E (1991). Reference and Information Services: An Introduction (Library and Information Science Text Series)/ Libraries Unlimited.

Chakrabarti, A. K. (1983). Reference Service. Hyderabad: APPLA.

Chakrabarti, M. L. (1987). Bibliography: Theory and Practice. 3<sup>rd</sup> Ed. Kolkata: World Press.

Davidson, Donald. (1980). Reference service. London: Clive Bingley.

Grogan, Denis. (1981). Practical reference work. 2<sup>nd</sup> ed. London: LA.

Harper, Meghan (2011). Reference Sources and Services for Youth . NY : Neal-Schuman Publishers.

Krishan Kumar (1999). Reference Service. 4th ed. New Delhi: Vikas.

Mukherjee, A.K. (1984). Reference works and its tools. Calcutta: World Press.

**LIS 1046 Organization of Knowledge (Practice)**

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Exemplify the application of facet analysis and sequencing of facets in Colon Classification;
- Construct class numbers according to Colon Classification, 6<sup>th</sup> Revised Edition;
- Classify documents according to Dewey Decimal classification 23<sup>rd</sup> Edition; and
- Catalogue a reading material.

**Detailed Syllabus****(A) Library Classification****(Ai) Colon Classification**

Classification of Documents representing basic, compound and complex subjects according to CC (6<sup>th</sup> Rev Edition)

**(Aii) Dewey Decimal Classification**

Classification of Documents representing basic and compound subjects according to DDC (Latest available edition)

**(B) Library Cataloguing**

Unit 1 Main entries for personal author(s), shared responsibility, mixed responsibility, editorial publications, periodicals and other serial publications, multivolume, pseudonyms, corporate bodies and non-book materials according to AACR- 2R (latest edition)

Unit 2 Assigning **Subject Headings** using SLSH or LCSH (Latest available edition)

**Suggested Readings**

Cham, Lois Mai and others. (1996). Dewey Decimal Classification: A practical guide. New York: Forest Press.

- Dewey, Melville (1971). Dewey Decimal Classification and Relative Index. 22nd ed. 4V. New York: Forest Press.
- Dhiman, Anil Kumar & Rani, Yashoda (2005). Learn Library Cataloguing: Learning Library Science Series. New Delhi: Ess Ess Publications.
- Kumar, Krishan & Garg, B.S. (2005). Advanced Cataloguing Practice: Based on Anglo-American Cataloguing Rules. New Delhi: Har-Anand Publications Pvt. Ltd.
- Raju, A.A.N. (1995). Dewey Decimal Classification (DDC 20): Theory and practice: a practical self instructional manual. Madras: T. R. Pub.
- Satija, M.P and Comaroni, M.P (1998). Exercises in the 21st Edition of DDC. Revised and Enlarged. New Delhi: Sterling.

### **LIS 1056 Computer Application in LIS**

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Distinguish between different categories and types of computers and identify the characteristics of each;
- Identify the functional components of a modern computer system and explain its working;
- Explain the functions of different kinds of softwares;
- Appreciate the impact of automation on library services and library management; and
- Introduce computer to carry out different library activities.

### **Detailed Syllabus**

- Unit 1 Computer basics: Classification of computers; Developments in the computer architecture; Information and Communication Technology (ICT): trend and components
- Unit 2 Basic structure of a digital computer: memory system (RAM, ROM, Virtual memory), Hardware components, Input, Output and Peripheral devices
- Unit 3 Software: Application and System SW, Working with Application SW (Word processor, Spread sheet and Presentation tool).
- Unit 4 Working with System SW (Windows, Basic commands in Linux).
- Unit 5 Library automation: Need and advantages; Planning and implementation of library automation; Steps in Library automation; Selection of hardware and software, Areas of Library Automation.

### **Suggested Readings**

- Ahmad, Shamim (2008). Computer in Library Management. New Delhi: A.P.H. Publishing Corporation.
- Barman, Badan (2012). Library and Information Science: UGC NET Guide. Guwahati: DVS Publishers.
- Mano, Moris M (2013). Digital Logic and Computer Design. New Delhi: McGraw-Hill
- Nair, R. Raman. (1992). Computer application to library and information services. New Delhi: Ess Ess.
- Norton, Peter (2000). Peter Norton's Introduction to Computers. New Delhi: McGraw-Hill
- Rajaraman, V and Adabala, N. Fundamentals of Computers, 6th Ed. Delhi: PHI Learning Pvt Ltd.
- Singh, Sanjay Kumar (2014). Impact of ICT on management of library operations. New Delhi: Avon Publications.

### **LIS 2016 Management of Library Information Centres**

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Explain different theories of management;
- Define and comprehend the components of human resources management;
- Formulate the budget proposal keeping in view both budgeting aspects and functions of a library;
- Identify and describe the functions of different sections of the libraries; and
- Appreciate the purpose and function of different kinds of library statistics.

### **Detailed Syllabus**

- Unit 1 Management: concepts, definition, scope; Management styles and approaches; Management schools of thought; Functions and principles of scientific management.
- Unit 2 Human resource management; Human resource development: professional and semi professional levels; Job description; Job evaluation; Job Enrichment; Job Satisfaction; Motivation theories and their application; Group dynamics; In service training; Discipline and grievances work culture in libraries and role of Librarian; Performance appraisal, Annual Confidential Report; Library security
- Unit 3 Financial management; Resource mobilization; Budgeting: techniques and methods, budgetary control; Cost effectiveness and cost benefit analysis; Outsourcing: problems and prospects
- Unit 4 Library housekeeping operations; Different sections of LICs and their functions: Processing, Circulation, Serial control, Maintenance, Stock verification; Collection development: principles and theories, Selection tools; Good Office Committee; Online bookshops vs traditional bookshops, IFLA - Guidelines for a Collection Development Policy.
- Unit 5 Library statistics: purpose and types; Reporting: types of reports, annual report compilation, contents and style, Physical file management in libraries.

### **Suggested Readings**

- Kumar, Krishan (1987). Library Administration and Management. New Delhi: South Asia Books.
- Kumar, Krishan (2007). Library Management in Electronic Environment. New Delhi: Har-Anand Publications Pvt. Ltd.
- Mittal, R. L. (2007). Library Administration: Theory and Practice. New Delhi: Ess Ess Publications.
- Ranganathan, S. R. (2006). Library Administration. New Delhi: Ess Ess Publications.
- Redfern, B. (1995). Studies in library management. London: Clive Bingley.
- Sehy, K. (1976). Problems in library management. New Delhi: Vikas Publishing House.

### **LIS 2023 Information Communication & Information System**

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Distinguish between seemingly synonymous words, such as information, data, knowledge, facts, and wisdom;
- Appreciate the role of information systems methodologies;
- Comprehend the sources for different types of information;

### **Detailed Syllabus**

- Unit 1 Characteristics of information: Definition of knowledge, information and data; Information explosion, information and social change; Information cycle; Scientific Communication: formal and informal channels and communication, Invisible colleges

- Unit 2 Information system: Concepts, definition and organization, Components of information system; Information system at National, Regional and International levels; Information system at sectoral level; CSIR, NISCAIR, NASSDOC, DESIDOC, SENDOC, ASTINFO, SAARC, APINESS, AGRIS, MEDLARS
- Unit 3 Information providers: DIALOG, BLDSC; Marketing of information; Knowledge management; Document management; National Knowledge Commission, National Knowledge Network.

### **Suggested Readings**

- Atherton, Pauline (1977). Handbook for information systems and services. Paris: Unesco.
- Debons, A. (1974). Information Science : A search for identity. New York: Dekker.
- McGarry, Kevin (1993). The changing Context of Information : An Introductory analysis. 2nd ed. London: Library Association.

### **LIS 2033 System Analysis Design**

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Describe the concept of system, system analysis and design;
- Acquainted with the concept of information analysis and consolidation; and
- Use Flow Chart, DFD, SWOT PERT/CPM as and when needed.

### **Detailed Syllabus**

- Unit 1 System concepts and information system; System development life cycle; Role of system analyst; Planning and conduction a system study
- Unit 2 Repackaging formatting, and consolidation; Current analysis including content creation; Trends of information analysis
- Unit 3 Planning and investigations; Information gathering; Structured analysis tools; Operations research: Flow chart, Gnatt chart, Data Flow Diagram (DFD); Strength, Weakness, Opportunities, Threat (SWOT), Programme Evaluation and Review Techniques/ Critical Path Methods (PERT/CPM)

### **Suggested Readings**

- Chapman, Edward A; Pierre ST. P L and Lubans Jr, John (1970). Library System Analysis Guidelines. New York: Wiley.
- Osborne, Larry N and Nakamura, M (2000). System Analysis for Librarian and Information Professionals. Englewood: Libraries Unlimited.
- Whitten, Jeffery L; Bentley, Lonnie D and Dittman, Kevin C (2012). System Analysis and Design. Ney York: McGraw-Hill.

### **LIS 2043 Preservation & Conservation (C)**

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Describe the objectives of preservation and conservation of library materials;
- Identify the strategy for the preservation and conservation of the various library materials; and
- Plan and act on the steps required for preservation of various library materials.

### **Detailed Syllabus**

- Unit 1 Preservation: concept and need; General approach to preservation; Preservation of Information; Preservation measures; Conservation, restoration and reproduction: concept and need.



- Unit 2 Preservation of Reading materials: Palm Leaves, Birch Bark, Sanchi Manuscripts, Books, Periodicals, Newspapers, and Pamphlets; Preservation tools and techniques; National Mission of Manuscript
- Unit 3 Preservation Methods of Non-Book Materials: Electronic Document in Different Forms, Web Resource, Digital Preservation.

### **Suggested Readings**

- Balakrishnan, S. and Paliwal, P K ed (2001). Preservation of Library Collections. New Delhi: Anmol Publication.
- Deegan, Marilyn and Tanner, Simon, ed.(2006). Digital Preservation. London :Facet.
- Feather, John (1996).Preservation and the management of library collections, London : Library Association.

### **Library Systems (Special: Either B1 or B2 or B3)**

#### **LIS 2053 Academic Library System (EC)**

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Explain the role of libraries at various levels of formal education;
- Grasp the role of UGC and NAAC in the promotion of libraries;
- Describe the contribution of Information and Library Network (INFLIBNET) towards libraries; and
- Recognize the role of building, lighting, interior decoration, furniture' and equipment in the libraries.

### **Detailed Syllabus**

- Unit 1 Academic library system: authority, collection, personnel, finance, services; Role of UGC, NAAC and other bodies in promoting libraries in universities, colleges, schools and other academic institutions in India
- Unit 2 Resource Sharing: need and objectives; INFLIBNET; Academic Library Networks; E- Resource Consortia: Indian Initiatives; Future of Academic Library
- Unit 3 Library Buildings: planning and designing, library building standards; Library furniture and fittings; Concept of modular building; Library building in present context.

### **Suggested Readings**

- Johnson, Edward R. & Mann, Stuart H. (1980). Organization Development for Academic Libraries: An Evaluation of the Management Review and Analysis Program. London: Greenwood Press.
- Jordan, Peter (1998). The Academic Library and Its Users. New York: Routledge.
- Lahkar, Narendra & Singh, Sanjay Kumar (Eds.) (2014). North East India Library Network: Challenges and Opportunities. Guwahati: Department of Library and Information Science, Gauhati University.
- Lahkar, Narendra (Ed.) (2016). Prospects of Consortia for North East India Libraries: Guwahati: Department of Library and Information Science, Gauhati University.
- Panda, B. D. (1992). The Growth of Academic Library System. New Delhi: Anmol Publications Pvt. Limited.
- Sahai, S. N. (1990). Academic Library System. New Delhi: Allied Publishers Limited.

#### **LIS 2063 Public Library System (E)**

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Appreciate the functioning of the public libraries;
- Comprehend the need and purpose of library legislation for public library services; and
- Recognize the role of building, lighting, interior decoration, furniture' and equipment in the libraries.

### Detailed Syllabus

Unit 1 Public library system: authority, collection, personnel, finance, services; Public libraries in India and role of RRRLF, Public library consortia: need, UNESCO, UNESCO Public Library Manifesto.

Unit 2 Library legislation: need, purpose and advantages; Library Acts in India; The Press and Registration of Books Act, 1867, The Delivery of Books “and Newspapers” (Public Libraries) Act, 1954 and 1956.

Unit 3 Library Buildings: planning and designing, library building standards; Library furniture and fittings; Concept of modular building; Library building in present context.

### Suggested Readings

Devarajan, G. & Nayar, M. N. Ramakrishnan (1990). Public Library System in India. New Delhi: Ess Ess Publications.

Government of India (1867). The Press and Registration of Books Act, 1867. Retrieved from <http://rni.nic.in/prbact.asp>

Government of India (1956). The Delivery of Books and Newspapers (Public Libraries) Act, 1956. Retrieved from [http://www.nationallibrary.gov.in/nat\\_lib\\_stat/pdfs/db-act.pdf](http://www.nationallibrary.gov.in/nat_lib_stat/pdfs/db-act.pdf)

Hada, Kapil Singh & Bajpai, R. P. (2014). Integrated Indian Public Library System. Gurgaon: Partridge Publishing.

Kim, Choong Han & Little, Robert David (1987). Public Library Users and Uses: A Market Research Handbook. USA: Scarecrow Press.

Munchen, K G Saur (2001). The Public Library Service: IFLA / UNESCO Guidelines for Development. Retrieved from: <http://www.ifla.org/files/assets/hq/publications/archive/the-public-library-service/publ97.pdf>

Raval, Ajaykumar (2013). Handbook of Public Library System. New Delhi: Discovery Publishing House.

### LIS 2073 Special Library System (E)

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Identify and describe the activities, functions and services of special libraries that are attached to different types of organisations;
- Distinguish the specific characteristics of special libraries with reference to their specialised products and services; and
- Recognize the role of building, lighting, interior decoration, furniture' and equipment in the libraries.

### Detailed Syllabus

Unit 1 Special library system: authority, collection, personnel, finance, services; Study of selected libraries: National library: India, USA, UK; National Science Library, Libraries in S & T Institutes, Role of DST in India

Unit2 Collection development; Role of ICT; Resource sharing and networking; Special library Consortia in India and abroad

Unit 3 Library Buildings: planning and designing, library building standards; Library furniture and fittings; Concept of modular building; Library building in present context.

### **Suggested Readings**

Guha, B (1983). Documentation and Information: services, techniques & systems. Calcutta: World Press

Panda, B. D. (1992). Towards a Special Library System. New Delhi: Anmol Publications.

Singh, S. P. & Kumar, Krishan (2005). Special Libraries in the Electronic Environment. Delhi: Bookwell.

### **LIS 2086 Organization of Knowledge (Practice)**

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Identify the different types of common isolates and their use in DDC and UDC.
- Classify documents according to Dewey Decimal Classification 23<sup>rd</sup> Edition; and
- Classify documents according to Universal Decimal Classification Abridged Edition;

### **Detailed Syllabus**

#### **(A) Dewey Decimal Classification (DDC)**

Classification of Documents requiring use of Common Subdivisions and other auxiliaries, Complex subjects according to DDC (Latest available edition)

#### **(B) Universal Decimal Classification (UDC)**

Classification of Documents: basic, compound and complex subjects according to UDC (Latest available abridged edition)

### **Suggested Readings**

Dewey, Melville (1971). Dewey Decimal Classification and Relative Index. 22nd ed. 4V. New York: Forest Press.

International Federation for Documentation (1977). Universal Decimal Classification. London: British Standards Institution.

Raju, A. A. N. (2007). Universal Decimal Classification (IME-1993): Theory and Practice: A Self Instructional Manual. New Delhi: Ess Ess Publications.

Raju, A.A.N. (1995). Dewey Decimal Classification (DDC 20): Theory and practice: a practical self instructional manual. Madras: T. R. Pub.

Satija, M.P and Comaroni, M.P (1998). Exercises in the 21st Edition of DDC. Revised and Enlarged. New Delhi: Sterling.

Satyanarayana V V V (1998). Universal Decimal Classification: a Practical Primer. New Delhi: Ess Ess Publications.

### **LIS 2096 ICT Application in Library & Information System**

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Describe different components of ICT;
- Visualise the importance of ICT to provide different kinds of library and information services;
- Comprehend the uses of ICT for storage and retrieval of information;
- Grasp all components of library networks and its services; and

- Trace the publishers of different kinds of e-resources and the different access points they provide.

### Detailed Syllabus

- Unit 1 Components of ICT; Communication Technology: Fundamentals and applications; Networks and Networking: Tools and Architecture; Data Transmission Techniques, Transmission Modes, Bandwidths; Internet and Intranet application
- Unit 2 Communication Technology: Transmission media- Switching system, Bandwidth, Multiplex, Protocol; Wireless communication; Fax, Email, Teleconferencing/ Videoconferencing, Videotext, Voicemail
- Unit 3 ICT in Storage and Publishing: Storage technology; Print and Non-print Media; E-Publishing, E- Achieving and Desktop Publishing; Multimedia and Hypermedia
- Unit 4 Networking: Concept; Network types: LAN, MAN, WAN; Network Topologies: Bus, Star, Ring, Mesh, Tree; Hypertext, Hypermedia, Multimedia; Network and Consortia: ERNET, NICNET, DELNET, INFLIBNET, JANET, BLAISE, OCLC
- Unit 5 E-resource management: Subscription of E-resources, licensing, perpetual access, backup and recovery, retention policy; Indexing of E-resource

### Suggested Readings

- Devarajan, G. (1999). Information technology for libraries. New Delhi: Ess Ess.
- Internetworking with TCP/IP: Principles, protocols and architecture. New Delhi: Pearson
- Lahkar, Narendra & Singh, Sanjay Kumar (Eds.) (2014). North East India Library Network: Challenges and Opportunities. Guwahati: Department of Library and Information Science, Gauhati University.
- Lahkar, Narendra (Ed.) (2016). Prospects of Consortia for North East India Libraries: Guwahati: Department of Library and Information Science, Gauhati University.
- Martin, Michael J (2000). Understanding the network: a practical guide to internetworking. Indianapolis: New Riders.
- Tannenbaum, Andrew (2013). Computer Networks. New Delhi, Prentice Hall

### LIS 3016 Research Methodology

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Develop ability to apply multi disciplinary concepts, tools and techniques in research;
- Identify and formulate research problems;
- Write a good research proposal;
- Identify and use appropriate research methodology;
- Collect and analyse data; and
- Apply appropriate tools, techniques and methods and statistics to the field of library and information science.

### Detailed Syllabus

- Unit 1 Research: concept, meaning, need and process; Types of research: fundamental and applied including inter- disciplinary and multi-disciplinary approach; Research and development of scholarship; Research and development of the nation; Research sponsorship; LIS Research in India
- Unit 2 Research Design: types of research design; Identification and formulation of problem; Hypothesis: nominal and operational definition, functions, types; Designing research proposal; Ethical aspects of research; Publication research results; Literature search: Print, non-print and electronic sources

Unit 3 Research Methods: scientific method, historical method, descriptive method, survey method and case study method, experimental method and Delphi method

Unit 4 Research Techniques and Tools: questionnaire, schedule, interview, observation, scales and check lists; Library records and reports; Sampling techniques; Report writing including citation style, EndNote.

Unit 5 Data Analysis and Interpretation: descriptive statistics; Measures of Central Tendency; Tabulation and generalization; Measures of dispersion, variance and covariance; Standard Deviation; Presentation of data: bar, pie-line graphs, histograms; Inferential statistics; Z test, T test, Chi Square Test; Correlation; Regression: linear and non-linear; Sociometry; Statistical packages-SPSS, R-Programming.

### **Suggested Readings**

Best, J. W. (2016). Research in Education. New Delhi: Pearson Education

Busha, C.H. and Harter, Stephen P. (1980). Research methods in librarianship: Techniques and interpretation. New York: Academic Press.

Goddard, Wayne & Melville, Stuart (2001). Research Methodology: An Introduction. Lansdowne: Juta.

Gupta, S.P. (1981). Statistical methods. Delhi: S. Chand.

Kothari, C. R. (2005). Research Methodology: Methods & Techniques. New Delhi: New Age International (P) Ltd.

Nie, Norman H and others. (1975). SPSS: Statistical package for the social sciences. 2nd ed. New York: McGraw-Hill.

Sardana, J.L. and Sehgal R.L. (1982). Statistical methods for Libraries. Delhi: Ess Ess.

Thompson, Steven K. (2013). Sampling. Hoboken: Wiley.

Weller, Susan C & Romney, A Kimball (1988). Systematic Data Collection. California: Sage Publications.

### **LIS 3023 Management Information System**

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Describe the principles followed in the process of system analysis and design;
- Apprehend the scope and areas of consultancy in Library and Information Science;
- Perceive meaning, components and applicability of TQM.

### **Detailed Syllabus**

Unit 1 Systems Study: Concept, Components analysis, evaluation and design, Library as a System, Subsystems of a Library; Performance evaluation of LICs; Management Information System (MIS): concept and use; Project management: definition, objectives, scope, organizational planning, stages

Unit 2 Management Consultancy: concept and evolution, need, pre-requisites and provisions; Impact on librarianship and libraries; Maturity of profession, impediments and way out, futuristic view

Unit 3 Total Quality Management (TQM): definition, concept, elements, quality audit; LIS related standards; Element and application to LICs, Standard- ISO-9001; Work studies

### **Suggested Readings**

Basandra, Suresh S. (1999). Management Information System. New Delhi: Wheeler Publishing.

Dandavate, Vrushali; Khatri, Ajay & Umdale, Pradip (2013). Application of Six Sigma in Library and Information Science. New Delhi: Ess Ess Publications.

- Hewitt, R. (1969). Library management. London: Crosby Lockwood & Son.
- Jain, P L (2006). Quality Control and Total Quality Management. New Delhi: Tata McGraw-Hill.
- Mukherjee, P.N. (2006). Total Quality Management. New Delhi: Prentice-Hall of India Private Limited.
- Reddy, T. S. (2012). Library management and information technology. Delhi: Pacific Books International.

### **LIS 3033 Management of E Resources**

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Describe different types of E-Resources and their subscription policies;
- Comprehend the role of E-Resources in developing library network and consortia; and
- Recognize the issues and challenges in acquiring and providing access to E-Resources.

#### **Detailed Syllabus**

- Unit 1 Concept of E Resource management: Definition, scope, types and Trends of growth  
Acquisition of E- Resources: Acquisition policy, Access policy, Subscription policy;
- Unit 2 Role of E-Resources Consortia for Resource Sharing, Consortia and E resources,  
Paradigm shift of Resource sharing in consortia based environment
- Unit 3 Issues and Challenges of E- Resource Management: Changing technology,  
pricing model, infrastructure requirements, Need of research and training, User and staff training, Future of E Resource

#### **Suggested Readings**

- Albitz, Becky (2008). Licensing and Managing Electronic Resources. Chandos Publishing. United Kingdom: Chandos Publishing (Oxford) Limited.
- Fenner, Audrey (2005). Managing Digital Resources in Libraries. London: Routledge.
- Lahkar, Narendra (Ed.) (2016). Prospects of Consortia for North East India Libraries: Guwahati: Department of Library and Information Science, Gauhati University.
- Lee, Sul H. (Ed.) (2002). Electronic Resources and Collection Development. New York: The Haworth Information Press.

### **LIS 3043 Web Resources**

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Explain the basic nature of the Internet and its security;
- Assess the opportunities that Intranets offer to libraries; and
- Design and develop a library website.

#### **Detailed Syllabus**

- Unit 1 Web resources; Internet: components, services, browsing and searching, search engines and web directories; Connectivity: dialup, leased line, ISDN, digital subscriber line, Wireless; Digital Object Identification; Internet security
- Unit 2 Web based library services, application of web 2.0 standards in library web services (RSS feed, IM, Blogs, Podcast, etc.
- Unit 3 Designing of Library websites.

#### **Suggested Readings**

Duckett, Jon (2014). Web Design with HTML, CSS, JavaScript and jQuery Set. Hoboken: Wiley.

Weir, Ryan O. (2012). Managing Electronic Resources: A LITA Guide. Chicago: Library and Information Technology Association.

XHTML and CSS Essentials for Library Web Design. Sauers, Michael P. (2006). New York: Neal-Schuman Publishers.

### **LIS 3053 Bibliometrics & Webometrics**

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Grasp the genesis, definition, scope, purpose and application of bibliometrics and webometrics;
- Explain the usability of citation index, impact factor and h-index; and
- Describe the uses of web 2.0 technologies in libraries.

#### **Detailed Syllabus**

Unit 1 Librametrics, Bibliometrics, Scientometrics, Infometrics: concept, definition and scope; Citation indexing: co-citation analysis, bibliographic coupling, h-index, impact factor, normalized impact factor

Unit 2 Citation index; Citation Analysis; Citation Studies Its usefulness and applications; Tools for citation analysis: WoS, Scopus, Google Scholar

Unit 3 Webometrics: scope and trend; Webometric indicators: domain and link analysis (WIF, TLD, SLD).

#### **Suggested Readings**

Devaranjan, G Ed. (1997) Bibliometrics Studies. Delhi: Ess Ess.

Hafner, Arthur W (1998). Descriptive statistical techniques for libraries, Chicago: ALA.

Ravichandrarao, IK (1983). Quantitative methods in library and information science

### **LIS 3063 Library Software Packages (Theory)**

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Trace the history of library software developments in India;
- Describe and discuss the capabilities of CDS/ISIS, WINISIS, SOUL, E-Granthalaya and Libsys; and
- Identity the uses of DSpace, GSDAL and Koha software.

#### **Detailed Syllabus**

Unit 1 Library software packages and their use in Indian libraries

Unit 2 Study and composition of CDS/ISIS, WINISIS, SOUL, Libsys, E-Granthalaya

Unit 3 Study on open source software packages; DSpace, GSDL and Koha

#### **Suggested Readings**

CDS/ISIS for Windows Reference Manual (Version 1.5) UNESCO, June 2004.

Duraspace (2016). DSpace. Retrieved from <http://www.dspace.org>

Government of India (2016). e-Granthalaya. Retrieved from: <http://egranthalaya.nic.in>

LibLime (2016). Koha - Open Source ILS - Integrated Library System. Retrieved from: <http://www.koha.org>

### **LIS 3073 Documentation Works**

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Collect and systematically organize the records for bibliographies; and
- Develop the writing, presentation skill to prepare bibliography.
- Explain the flow of document in libraries and its working environment; and
- Develop the writing, presentation skill to present an observation.

### Detailed Syllabus

#### (A) Bibliographic Project

Preparing current contents of two one monthlies/ one bimonthlies of one year  
 Preparing bibliography of selected topics with indexes;  
 Newspaper clipping;  
 Description of few selected library websites  
 (Each student will be assigned any one of the above)

#### (B) Library Visit Report

**Library Visit Report:** Students are required to prepare a “Report” on library workings and services by visiting few selected libraries of a place outside the state preferably of a metropolitan city; the visit will be organized by the Department.

### Suggested Readings

Chakrabarti, M. L. (1987). Bibliography: Theory and Practice. 3<sup>rd</sup> Ed. Kolkata: World Press.  
 Guha, B (1978). Documentation and Information. Calcutta: World Press  
 Heyn, Jan (2010). Website Evaluation - Branding, Transactional Facilities & Social Networking. GRIN Verlag: Open Publishing GmbH.  
 Maier, Philipp (2008). Website Evaluation: Model and Key Performance Indicators. St. Gallen.

### LIS 3086 Software Packages (Practice)

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Manage bibliographic information in CDS/ISIS and WINISIS Softwares;
- Install SOUL Software; and
- Make an entry in the SOUL software and use it.

### Detailed Syllabus

#### (A) CDS/ISIS and WINISIS

Database Creation and Use

#### (B) SOUL

All available modules (Latest version)  
 Installation, Database Creation and Use

### Suggested Readings

CDS/ISIS for Windows Reference Manual (Version 1.5) UNESCO, June 2004.  
 INFLIBNET (2014). SOUL. Retrieved from <https://www.inflibnet.ac.in/soul/>

### LIS 4016 Information Storage and Retrieval System

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Identify the special features concerning Library and Information Storage that aid in Retrieval;
- Perceive different indexing languages;
- Acquainted with different types of vocabulary control devices;



- Comprehend the need for a database management system (DBMS) and
- Use various various search techniques to retrieve relevant information.

### Detailed Syllabus

Unit-1: Information storage and retrieval: principles nature, characteristics, tools: cataloguing and subject indexing, semantic and syntactical problems of indexing language

Unit-2: Brief history on different indexing techniques since Cutters rules for dictionary catalogue, pre-coordinate subject indexing systems (Chain Indexing, PRECIS, POPSI) and post coordinate indexing systems (Uniterm system, KWIC, KWOC).

Unit-3: Vocabulary control: need, functions, tools thesaurus (characteristics, structure and construction), classification schedules, subject heading lists (SLSH, LCSH)

Unit 4: Database Management System: Database Concepts and Types; Database Management Systems (DBMS, RDBMS):Models and Architecture; Concepts of Data Definition Language, Data Manipulation Language; Concepts of Entities, attributes and Relations; Entity Relationship Model, Diagram; Structured Query Language (SQL): basics

Unit 5: Browsing and searching of databases: types, techniques (Search Techniques: Boolean, Proximity, Truncation, Navigational, etc.) Retrieval models (Cognitive, Probabilistic, etc); Evaluation of indexing systems and retrieval performance (recall, precision); Application of artificial intelligence

### Suggested Readings

Chakraborty, AR and Chakraborty, B (1984). Indexing: Principles, processes and products. Calcutta: World press

Chowdhury, G.G. and Chowdhury, Sudatta (2007). Organizing information from the shelf to the web. London: Facet.

Cleveland, Donald D and Cleveland, Ana D. (2001). Introduction to indexing and abstracting. Englewood : Libraries Unlimited.

Ellis, David. (1996). Progress and problems in information retrieval. London: LA.

Elmasri, Ramez and Navathe, Shamkant B (2003). Fundamentals of database system. London: Addison-Wesley.

Management of libraries in 21st century (2000). ed by M. Bavakutty and M. Parameswaran. New Delhi: Ess Ess.

### LIS 4026 Digital Library System

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Do digitizations by selecting appropriate file types;
- Trace the development of digital libraries;
- Design and develop a website by using HTML and CSS;
- Define and describe the required metadata format for the library; and
- Design and develop a digital library.

### Detailed Syllabus

Unit 1 Digitization: Concept, Purpose, Methods and Tools; Digitization process; File formats: Image format, audio & video formats; Image editing software; OCR

Unit 2 Digital Library: Genesis, definition, objectives & scope; Metadata creation: HTML, CSS, Java script, XML; IPR, Copy right and Plagiarism, Digital Rights Management;

Unit 3 Developing Digital Library: Planning and Implementation; Selection of the softwares; Digital Library Initiatives in India and abroad; Digital library softwares

Unit 4 Metadata: standards; Metadata issues in Digital Library; Metadata harvesting: OAI-PMH, Ontology; Federated search, Unicode

Unit 5 Institutional Repository: concept, objectives, purpose and scope, coverage and utilization; Digital Preservation: tools and techniques

### **Suggested Readings**

Ahuja, V. (2015). Intellectual Property Rights in India. Gurgaon: LexisNexis.

Dahl, Mark; Banerjee, Kyle & Spalti, Michael (2006). Digital Libraries: Integrating Content and Systems. Great Britain: Chandos Publishing.

Eden, Bradford Lee (2007). Institutional Repositories. Bradford: Emerald Group Press.

King, David Lee (2012). Running the Digital Branch: Guidelines for Operating the Library Website. Chicago: American Library Association.

Rubenstein, Charles P. (2014). Web Design for Libraries. California: Libraries Unlimited.

Witten, I. H. & Bainbridge, David (2003). How to Build a Digital Library. San Francisco: Morgan Kaufmann Publishers.

### **LIS 4033 Library & Users**

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Realise the importance of user education as integral to the learning process;
- Identify users their information needs, and their behaviour in seeking information;
- Describe the information transfer process.

### **Detailed Syllabus**

Unit 1 Library Users: Concept, categories, Library user education: concepts, goals, objectives, levels; Evaluation of user education programme.

Unit 2 Information Literacy: Information literacy, Library literacy: Concept, technique and methods.

Unit 3 Information need: Definition, models. Information Seeking Behaviour, Information Transfer Cycle. Users Studies: Methods and techniques and evaluation of user studies.

### **Suggested Readings**

Armstrong, Sara (2008). Information Literacy: Navigating and Evaluating Today's Media. CA: Shell Education.

Johannsen, Carl Gustav (2015). Library User Metaphors and Services: How Librarians look at their Users. Boston: Walter de Gruyter GmbH.

Tella, Adeyinka (2016). Information Seeking Behavior and Challenges in Digital Libraries. USA: IGI Global.

### **LIS 4043 Internship**

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Acquainted with the working of different sections of the library; and
- Work effectively in the library.

### **Detailed Syllabus**

Students are to prepare job diary by working in the KKH Library or any other library specified by the department to have hands on experiences in every possible unit/section of a library. He/ She has to submit a certificate of satisfaction from the Library Authority;

**Suggested Readings**

- Bailey, Stephen (2003). *Academic Writing: A Practical Guide for Students*. UK: Psychology Press.
- Luey, Beth (1987). *A Handbook for Academic Authors*. New York: Cambridge University Press.
- Winstanley, C. (2012). *Writing a Dissertation for Dummies*. Manhattan, New York: Wiley: Dummies.

**LIS 4056 Open Source Software Packages (Practice)**

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Install Koha and DSpace Open Source Software;
- Make an entry in the Koha software;
- Customize the Koha and DSpace software to meet the need of specific libraries; and
- Upload a file in the DSpace software.

**Detailed Syllabus****(A) Koha**

Installation, Database Creation and Use

**(B) DSpace**

All available modules (Latest version)  
Installation, Database Creation and Use

**Suggested Readings**

- Ashraf, Tariq and Gulati, Puja Anand (2013). *Design, Development and Management of Resources for Digital Library Services*. Harshey PA (USA): Information Services Reference.
- Duraspace (2016). DSpace. Retrieved from <http://www.dspace.org>
- Koha Library Software Community (2016). Official Website of Koha Library Software. Retrieved from: <https://koha-community.org/>
- LibLime (2016). Koha - Open Source ILS - Integrated Library System. Retrieved from: <http://www.koha.org>

**LIS 4066 Dissertation**

**Course Outcomes (COs):** After completion of this course, you will be able to:

- Identify and formulate a research problem;
- Write a good research proposal;
- Solve a problem through proper scientific method of investigation and appropriate research methodology;
- Apply appropriate tools, techniques, methods and statistics to collect and analysis of the data; and
- Develop writing, analytical and presentation skill.

**Detailed Syllabus**

Students are to prepare one dissertation on a selected topic of present relevance to be submitted one week before the start of the 4<sup>th</sup> semester examination. Topic will be assigned during 3<sup>rd</sup> semester. There will be an open viva with all internal examiners.

**Suggested Readings**

- Bailey, Stephen (2003). *Academic Writing: A Practical Guide for Students*. UK: Psychology Press.

- Luey, Beth (1987). *A Handbook for Academic Authors*. New York: Cambridge University Press.
- Murray, Rowena (2011). *How to Write a Thesis*. Maidenhead: Open University Press.
- Oliver, P. (2008). *Writing your Thesis*. New Delhi: Sage South Asia.
- Teitelbaum, Harry (1994). *How to Write a Thesis: A Guide to the Research Paper*. New York: Macmillan.
- Winstanley, C. (2012). *Writing a Dissertation for Dummies*. Manhattan, New York: Wiley: Dummies.