Detailed Syllabus

LIS-511: FOUNDATIONS OF LIBRARY AND INFORMATION SCIENCE (4 Credits)

Unit 1 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

Unit 2 Normative Principles of Library and Information Science

- Five Laws of Library Science
- Implications of Five Laws in library and information activities

Unit 3 **Library Development**

- Development of libraries with special reference to India
- Library movement in Kerala
- Resource sharing and library networking

Unit 4 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
- Copyright

Unit 5 Library and Information Profession

- Attributes of profession
- Librarianship as a Profession
- Professional ethics
- Professional associations and their role
- National and international library associations: ILA, IASLIC, IATLIS, CILIP, SLA, ALA, ASLIB, SPARC
- Professional education and research

Unit 6 Promoters of Library and Information Services

- National level promoters: RRRLF, UGC
- International level promoters UNESCO, FID, IFLA

Unit 7 Public Relations and Extension Activities

- Definition
- Facets and programs
- Publicity and extension, outreach activities
- Library path finders (guides)
- Consultancy including promotional web tools

LIS-512 – LIBRARY MANAGEMENT (4 Credits)

Unit 1 Management

- Concept, definition and scope
- Management schools of thought
- Principles of scientific management
- Favol's Principles
- POSDCORB
- Management styles and approaches

Unit 2 System Analysis and Design

- Library as a system
- Project management, PERT/CPM
- Decision tables
- Performance evaluation standards
- Performance measurement,
- SWOT (Strength Weakness Opportunities Threat)
- DFD (Data Flow Diagram)

Unit 3 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

Unit 4 Library House Keeping Operations: Readers' 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

LIS-513 : ORGANIZATION OF KNOWLEDGE: LIBRARY CLASSIFICATION (THEORY) (3 Credits)

Unit 1 Organization of knowledge in libraries

- Library classification: Purpose and functions.
- Species of library classification
- Overview of Dewey Decimal Classification, Universal Decimal Classification and Colon Classification.
- Class Number, Book Number and Collection Number

Unit 2 Normative principles:

- Planes of work
- Characteristics,
- Array
- Chain
- Filiatory sequence
- Principles for helpful sequence
- Terminology
- Notation, Qualities of notation, Zones of notation in the CC

Unit 3 Facet analysis

- Universe of knowledge and its characteristics
- Modes of formation of subjects
- Analytico-synthetic classification for a growing universe
- Concepts of fundamental categories and facets.
- Principles for facet sequence.
- Postulational Procedure.
- Design of a depth schedule of classification
- Trends in library classification

LIS-514: ORGANIZATION OF KNOWLEDGE: DEWEY DECIMAL CLASSIFICATION (PRACTICAL) (2 Credits)

• Classification simple and complicated specific subjects of macro-documents as well as micro-documents using the Dewey Decimal Classification, Ed 21 Record of Term Work: Class Numbers of not less than 75 specific subjects have to be worked out and presented as a record of term work

LIS-515: ORGANIZATION OF KNOWLEDGE: COLON CLASSIFICATION (PRACTICAL) (2 Credits)

• Classification simple, compound and complex subjects of macro-documents as well as micro-documents using the Colon Classification, Ed 6 (revised)

Record of Term Work: Class Numbers of not less than 75 specific subjects have to be worked out and presented as a record of term work

OPTIONALS: Any one of the following courses can be opted.

LIS-516: ORGANIZATION OF KNOWLEDGE: UNIVERSAL DECIMAL CLASSIFICATION (PRACTICAL) (1 Credit)

• Classification simple and complicated specific subjects of macro-documents as well as micro-documents using the Universal Decimal Classification, Abridged edition, supplemented with the Medium Edition

Record of Term Work: Class Numbers of not less than 75 specific subjects have to be worked out and presented as a record of term work

LIS-517: INTELLECTUAL PRPOPERTY RIGHTS AND LIBRARIES (1 Credit)

Unit 1 Intellectual property rights

- Meaning and Scope
- Areas of application

Unit 2 International treaties on IPR

- Berne Convention
- Universal Copyright Convention
- Stockholm Conference
- Paris Convention
- WIPO Copyright Treaty
- GATT
- TRIPS

Unit 3 National Laws

- Copyright Law of India
- Patent Law of India and ammendments

Unit 4 Copyright Law in the digital age

- Protection of web-based content
- Copyright and libraries

LIS-521: INFORMATION AND COMMUNICATION (4 Credits)

Unit 1 Information and Communication

- Information: characteristics, nature, value, and use of information
- Conceptual difference between data, information and knowledge
- Communication of information
- Communication channels, models and barriers
- Trends in scientific communication

Unit 2 Information Science

- Definition, scope and objectives
- Information science as a discipline and its relationship with other subjects

Unit 3 Library, Information and Society

- Genesis, characteristics and implications of information society
- Changing role of library and information centres in society
- Intellectual Property Acts, Right to Information Act
- Concept of freedom, censorship, data security and fair use
- International and national programmes and policies (NAPLIS) UAP, UBC
- Open Access Movement

Unit 4 **Economics of Information**

- Information industry: generators, providers and intermediaries
- Information audit

Information Management, Knowledge Management

LIS-522: INFORMATION SOURCES (3 Credits)

Unit 1 Physical media of information:

- Evolution of physical media
- Classification of information sources
 - o Documentary and non-documentary
 - o Print and non-print
 - o Primary, secondary and tertiary

Unit 2 **Primary Sources**:

- Periodicals
- Patents and specifications, standards.
- Research reports, theses and dissertations
- Government publications.

Unit 3 Secondary and Tertiary Sources.

- Bibliographies; Union Catalogues
- Indexing, Abstracting and Reviewing Periodicals
- Dictionaries
- Encyclopedias
- Biographical Sources
- Directories and Yearbooks
- Geographical Sources
- Statistical Sources
- Current Information Sources
- Bibliography of Bibliographies
- Guides to Literature

Unit 4 Electronic Resources

- Multimedia Sources
- Databases
- Online sources and vendors

Project Evaluation of not less than 75 reference sources including electronic resources

LIS-523: INFORMATION SERVICES (3 Credits)

Unit 1 Information Users and their Information Needs

- Categories of information users
- Information needs: definition and models
- Information seeking behaviour
- User studies, methods, techniques and evaluation

Unit 2 Reference Service

- Concept, definition and trends
- Reference interview and search techniques

Unit 3 Information Services and Products

- Information services: concepts, definition, need and trends
- Need, techniques and evaluation of alerting services (CAS & SDI)
- Bibliographic, referral, document delivery and translation services

Unit 4 Information Systems and their Services

 Study of national, international and commercial information systems and services: background, services and products

Unit 5 User Education

- Goals and objectives, levels, techniques and methods, evaluation of users educational programmes
- Information literacy programmes

$\begin{array}{c} Project & \textbf{Compilation of current awareness list/bibliography/contents list/press} \\ \textbf{clippings} \end{array}$

LIS-524 : ORGANIZATION OF KNOWLEDGE: LIBRARY CATALOGUE (Theory)

(3 Credits)

Unit 1 Bibliographic records:

- Concept of surrogate
- Structure and functions of bibliographic records
- FRBR
- ISBD
- Record formats: UNIMARC, CCF, ISO 2709, MARC21
- Metadata, Dublin Core, OAI

Unit 2 **Library catalogues:**

- Functions of library catalogue
- Structure and types of catalogues
- Filing rules
- OPAC

Unit 3 Normative principles of cataloguing

- Fundamental laws
- Canons

principles

Unit 4 Cataloguing electronic resources

LIS-525: ORGANIZATION OF KNOWLEDGE: LIBRARY CATALOGUE (PRACTICAL) (3 Credits)

Unit 1 Bibliographic Description

• Description of books and periodicals according to AACR2R

Unit 2 Access Points for a Dictionary Catalogue

- Choice and rendering of headings of entries for a Dictionary Catalogue according to AACR2R
 - Works of personal authorship
 - Works of corporate responsibility
 - Anonymous and pseudonymous works
- Subject entries to be prepared according to the Sears' List of Subject Headings

Unit 3 Access Points for a Classified Catalogue

- Choice and rendering of headings of entries for a Classified Catalogue according to CCC
 - Works of personal authorship
 - Works of corporate responsibility
 - o Anonymous and pseudonymous works
- Chain Procedure has to be used to derive headings of Class Index Entries

Project **Records of term work** comprising sample catalogues, both classified and dictionary catalogues, have to be prepared.

LIS-531 : PLANNING AND MANAGEMENT OF LIBRARIES AND INFORMATION CENTRES (4 Credits)

Unit 1 Planning

- Concept, definition, need and purpose
- Policies and procedures, MBO

Unit 2 Human Resource Management

- Organizational structure
- Job description and analysis
- Job classification
- Recruitment, selection, induction
- Training and development
- Motivation; group dynamics
- Interpersonal relations
- Performance appraisal
- Stress management
- Delegation, communication and participation

Unit 3 Directing, Co-ordinating and Reporting

- Communication
- Library rules
- Staff manual
- Library statistics

- Types of Reports:
 - Annual report compilation, contents and style
 - o Periodical progress / review reports

Unit 4 Financial Management

- Methods of financial estimation
- Sources of finance
- Budgeting techniques: Line, PPBS, Zero Based Budgeting etc
- Cost effectiveness and cost benefit analysis
- Expenditure monitoring and review
- Outsourcing

Unit 5 Total Quality Management (TQM)

- Definition, concept, elements
- Quality audit, LIS related standards, SERVQUAL

Space Management

- Building: Lay out and space estimation
- Furniture and equipment

Marketing Management

- Concept, definition and need
- Marketing of information services and products

Change Management

- Concept, tools and techniques
- Problems of incorporating change

LIS-532: RESEARCH METHODOLOGY (4 Credits)

Unit 1 Research

- Concept, meaning, need and process of research
- Types of research: fundamental and applied including inter disciplinary and multidisciplinary approach
- Research and development of scholarship

Unit 2 Research Design

- Conceptualisation and operationalisation
- 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

Unit 3 Research Methods

- Scientific method
- Historical method
- Descriptive method
- Survey method and case study method
- Experimental method and Delphi method
- Brainstorming method

Unit 4 Research Techniques and Tools

- Questionnaire
- Schedule
- Interview

- Observation
- Scales and check lists
- Library records and reports
- Sampling techniques

Unit 5 Research Reporting

- Structure, style, contents
- Guidelines for research reporting
- Style manuals: Chicago-MLA-APA etc
- e-citation and methods of research evaluation

Current Trends in library and Information Science Research

LIS-533: INFORMATION PROCESSING AND RETRIEVAL (4 Credits)

Unit 1 Subject analysis and representation

- Problems in subject retrieval
- Subject analysis and representation
- Mapping of knowledge in classification schemes
- Subject indexing languages
- Semantics and syntax
- Vocabulary control. Thesaurus

Unit 2 Indexing systems

- Pre coordinate and Post coordinate indexing systems
 - Sears List of Subject Heading, LCSH
 - o Chain Indexing
 - o PRECIS
 - o POPSI
 - o Uniterm indexing
- Citation indexing
- Natural language indexing
- Automatic indexing

Unit 3 Information retrieval systems

- I R Models
- Search strategies: manual and machine
- Parameters of evaluation
- Trends in evaluation studies

Unit 4 National and international information systems

- OCLC, MEDLARS, UNISIST
- INFLIBNET, DELNET, NICNET, ERNET

Project Practice of assigned and derived indexing

LIS-534 INFORMATION TECHNOLOGY APPLICATION IN LIS (PRACTICAL) (4 Credits)

Unit 1 Bibliographic Database Management

• WINISIS or CDS/ISIS

Unit 2 Library Application Package

SOUL

Unit 3 Web Design

Unit 4 Digital Library software

• Greenstone or DSpace

LIS-541: TECHNICAL COMMUNICATION (4 Credits)

Unit 1 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

Unit 2 Organization, lay out and presentation of information in:

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

Book design and page lay out

Unit 3 Consolidation and repackaging of information

Preparation of trend reports and reviews

Content development for web pages

Unit 4 Mechanics of writing

- Common problems in spelling, grammar, usage and punctuation
- Use of style manuals
- Copy editing
- Proof reading

Unit 5 Oral presentation skills

LIS-542: INFORMATION TECHNOLOGY APPLICATIONS IN LIS (4 Credits)

Unit 1 **Library automation**

- Planning and implementation
- Automation of inhouse operations
 - File requirements for Acquisition, Cataloguing, Circulation control, Serials control, OPAC
- Library automation packages
 - o SOUL, Alice for Windows, Libsys

Unit 2 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, WAN, MAN, Wireless
- Bus, Star, Ring and Token ring
- Local area network types and topologies

Unit 3 INTERNET: Basic features and tools

Network based information services

- Connectivity: Dial up, Lease line, ISDN, Digital subscriber lines
- Email, SMTP, Wireless, Send mail, POP3 CK
- Protocols: FTP. HTTP
- Web browser: Netscape navigator, Internet explorer
- Web servers, Web tools, Search engines
- Internet security
- Teleconferencing, Telefacsimile
- Web 2

Unit 4 **Digital Libraries**

- Genesis, definition, objectives and scope
- Genesis, definition, objectives, scope
- Image formats, audio formation
- Storage media formats-180-9669 DVD
- Software and Hardware for digital libraries, OCR, image editing software
- Input capture devices, scanners, digital and movie cameras
- Data warehousing, data mining and meta data

Unit 5 Artificial Intelligence & Expert Systems

LIS-543 DISSERTATION AND VIVA VOCE (4 Credits)

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.

OPTIONALS: Courses for 4 credits have to be opted from among the following

LIS-544 INFORMATION SYSTEMS (3 Credits)

Any one of the following

Science Information System
Social Science Information system
Media Libraries
Medical Information System
Industrial Information System
Public Library System

Areas of Study

Unit 1 Nature, scope and development

- Definition and scope, Terminology
- Development of the system
- Present scenario in India

Unit 2 Planning

- Guidelines for planning
- Planning
- Design
- Evaluation

Unit 3 Database development

- Design, creation and development in the areas pertaining to information components of the subject
- Selection of DBMS
- Retrieval aspects
- Content creation and development

Unit 4 Available information systems and networks

- Information systems and networks in the subject / discipline
- Information sources and services
- Internet-based sources and services

LIS-545: BIBLIOMETRICS (1 Credit)

Unit 1 Basics

- Concept and Definition
- Bibliometric laws: Bradford's Law, Zipf's Law, Lotka's Law, Bibliometric models

Unit 2 Application

- Bibliographic coupling
- Cocitation analysis
- Obsolescence
- Citation analysis and citation studies

Unit 3 New developments

- Informetrics, Scientometrics
- Webometrics

LIS-546: BIBLIOGRAPHIC ORGANIZATION OF ELECTRONIC SOURCES

(1 Credit)

- Unit 1 Scope and variety of electronic resources. Special problems in bibliographic organization. Functional requirements of Bibliographic Records. Sources of Bibliographic data
- Unit 2 Preparation of description and choice and rendering of access points for the following categories of resources:
 - Audio and video recordings
 - Computer files, Web resources