

UNIVERSITY OF CALICUT
(Abstract)

MLISc Course – under Calicut University Credit Semester system — in affiliated colleges –Syllabus and Scheme implemented with effect from 2010 Admission – approved – implemented – Order Issued.

GENERAL AND ACADEMIC BRANCH IV 'B' SECTION

GAIV/B1/2297/2000 Vol (II) (i)

Dated, Calicut University.P.O., 29/07/2010.

- Read: 1) GAIV/ JI/1373/08 Dated 23-07-2010
2) Minutes of the meeting of the Board of Studies in Library Science held on 19-06-2010. (Item No.1)
3) Orders of the Vice Chacellor in the file of even No. 22-07-2010.

ORDER

Vide paper read 1st above, orders were issued implementing the regulations of Calicut University Credit Semester System at P.G level in affiliated colleges of the University with effect from 2010 admission onwards.

The Board of Studies in Library Science at its meeting held on 19-06-2010 (vide item No. 1) prepared and approved the syllabus for MLISc under Calicut University Credit Semester System in affiliated colleges.

The Vice Chancellor after having considered the urgency, exercising the powers of Academic Council and subject to ratification by Academic Council has approved the syllabus (Item No I of the minutes) for MLISc under CUCSS in affiliated colleges.

Orders are issued implementing the syllabus of MLISc course under CUCSS in affiliated colleges with effect from 2010 admission onwards.

Orders are issued accordingly.

Syllabus is appended here with.

Sd/-
DEPUTY REGISTRAR (G & A IV)
For **REGISTRAR**

To

The Principals of all Colleges offering MLISc.
Copy to: Controller of Examinations/ DR – AR P.G Section/Tabulation section /
Administrator to upload in the University website/Library/EG Sn./GAI F. Sn/
SF/DF/FC.

Forwarded / By Order

Sd/-
SECTION OFFI CER

Master of Library and Information Science (M.L.I.Sc.) Syllabus

(Choice Based Credit Semester System)
(Applicable from 2010 admission for affiliated Colleges)

(Appendix:A)

| Semester | Course No. | Course Title | Credits | Duration | Internal Assessment | Theory/Practical/Dissertation | Total |
|--|-----------------|---|---------|----------|---------------------|-------------------------------|-------|
| First | LIS1 C01 | Library, Information and Society | 4 | 3 Hrs | 20 | 80 | 100 |
| | LIS1 C02 | Library Management | 4 | 3 Hrs | 20 | 80 | 100 |
| | LIS1 C03 | Information Processing Theory (Classification and Cataloguing) | 4 | 3 Hrs | 20 | 80 | 100 |
| | LIS1 C04 | Information Processing Practice (Classification) (DDC 2 Credits) UDC 2 Credits) | 4 | 3 Hrs | 20 | 80 | 100 |
| Second | LIS2 C05 | Information Processing Practice (Cataloguing) | 4 | 3 Hrs | 20 | 80 | 100 |
| | LIS2 C06 | Information and Communication | 4 | 3 Hrs | 20 | 80 | 100 |
| | LIS2 C07 | Fundamentals of Information and Communication Technology | 4 | 3 Hrs | 20 | 80 | 100 |
| | LIS2 C08 | Information sources | 4 | 3 Hrs | 20 | 80 | 100 |
| | LIS2 E01 | Elective 1. Fundamentals of ICT | 4 | 3 Hrs | 20 | 80 | 100 |
| Internship of one month duration in a Library approved by the Departmental Council during summer holidays between II nd and III rd Semesters. Internal marks have to be awarded by the Librarian of the Library where the students has undergone internship. | | | 2 | | 20 | 30 | 50 |
| Third | LIS3 C09 | Information Systems and Services | 4 | 3 Hrs | 20 | 80 | 100 |
| | LIS3 C10 | Research Methodology | 4 | 3 Hrs | 20 | 80 | 100 |
| | LIS3 C11 | Application of Information and Communication Technology in LIS (Theory) | 4 | 3 | 20 | 80 | 100 |
| | LIS3 E02 | Elective 2. Statistics & Bibliometrics | 4 | 3 | 20 | 80 | 100 |
| | LIS3 E03 | Elective 3. Technical Communication | 4 | 3 | 20 | 80 | 100 |

| | | | | | | | |
|---------------|-----------------|---|-----------|---|-----|--|------|
| Fourth | LIS4 C12 | Information Processing and Retrieval | 4 | 3 | 20 | 80 | 100 |
| | LIS4 C13 | Application of Information and Communication Technology in LIS (Practice) | 4 | 3 | 20 | 80 | 100 |
| | LIS4 E04 | Elective 4. Organizing information Resources Practice | 4 | 3 | 20 | 80 | 100 |
| | LIS4 C14 | Dissertation and Viva Voce | 8 | | | 150(Dissertation-100 marks Vi voce-50 Mark) | |
| Total | | | 78 | | 360 | 1560 | 1900 |

**Master of Library and Information Science (M.L.I.Sc.)
Syllabus**

(Choice Based Credit Semester System)

FIRST SEMESTER

**Paper LIS1 C01- Library, Information and Society
(4 Credits)**

Unit 1. Library in the Social Context

- ❖ Libraries-evolution and types
- ❖ Libraries in the social and cultural context
- ❖ Concept of modern libraries
- ❖ Role of libraries in contemporary society
- ❖ Five laws of library science
- ❖ Implications of five laws in library and information activities
- ❖ National, public, academic and special libraries
- ❖ Types of academic libraries: school, college and university libraries
- ❖ National library of India

Unit 2. Resource Sharing and Extension Services

- ❖ Resource sharing
- ❖ Library extension services
- ❖ Library publicity
- ❖ Library networks: NICNET, CALIBNET, DELNET, ERNET, INFLIBNET.

Unit 3. Library Development

- ❖ Library movement in India
- ❖ Library movement in Kerala

Unit 4. Library Legislation

- ❖ Need, purpose and essential features of library legislation
- ❖ Library legislation in India - model public library bill of S.R.Ranganathan.
- ❖ Public library legislation in Kerala – Kerala Public Library Act 1989
- ❖ Indian copyright act – Delivery of Books and News papers (Public Libraries) Act.

Unit 5. Library and Information Profession

- ❖ Librarianship as a profession
- ❖ Professional ethics
- ❖ Professional associations and their role in the development of the profession
- ❖ National and International associations: IFLA, ILA, IASLIC
- ❖ Promotion of library and information services by UNESCO, UGC and RRRLF

Paper LIS1 C02- Library Management (4 Credits)

Unit 1. Management

- ❖ Concept, definition, and scope
- ❖ Management schools of thought
- ❖ Principles of scientific management
- ❖ Fayol's principles
- ❖ POSDCORB
- ❖ MBO
- ❖ Total quality management: definition, concepts, and elements

Unit 2. System Analysis and Design

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

Unit 3. Library Collection Management

- ❖ Different sections of library and information centres and their functions
- ❖ Acquisition procedures: selection, ordering and accessioning .
- ❖ Technical processing: classification, cataloguing and physical processing
- ❖ Circulation control: charging systems, interlibrary lending
- ❖ Serials control: selection, ordering receipt and display
- ❖ Special Collections
- ❖ Collection development : policies and procedures
- ❖ Maintenance of documents: Stock verification and rectification, withdrawals, replacements, preservation and conservation of library resources.

Unit 4. Human Resource Management

- ❖ Organizational structure
- ❖ Job analysis and description
- ❖ Job classification
- ❖ Recruitment, selection, induction
- ❖ Training and development
- ❖ Motivation
- ❖ Performance appraisal
- ❖ Stress management

Unit 5. Financial and Record Management

- ❖ Sources of finance
- ❖ Methods of Financial Estimation
- ❖ Budgeting techniques-Line, PPBS, Zero based budgeting
- ❖ Cost effectiveness and cost benefit analysis
- ❖ Outsourcing
- ❖ Annual report, staff manual, library rules and regulations

Paper LIS1 C03- Information Processing Theory (Classification and Cataloguing) (4 Credits)

Unit 1. Theory of Library Classification

- ❖ Need and purpose of library classification
- ❖ Normative principles of classification and their usefulness- Canons for idea plane
- ❖ Principles of helpful sequence
- ❖ Notation types- Qualities

Unit 2. Facet Analysis and Fundamental Categories

- ❖ Concept of facet analysis
- ❖ Fundamental categories
- ❖ Principles for facet sequence
- ❖ Call No., Class No., Book No., Collection No.

Unit 3. Classification Schemes

- ❖ Species of library classification schemes: Enumerative and faceted models
- ❖ Silent features of CC, DDC and UDC
- ❖ Universe of knowledge-structure and attributes, modes of formation of subjects, different types of subjects: simple, complex and compound subjects

Unit 4. Bibliographic Description

- ❖ Library catalogue : Its purpose and functions
- ❖ Physical forms : book form, card form, OPAC, WebOPAC
- ❖ Types of catalogue: Author catalogue and title catalogue – Dictionary catalogue and classified catalogue.
- ❖ Evolution of catalogue codes -CCC, ALA, AACR-I, AACR-II, Dublin core
- ❖ Bibliographic description & Meta Data standards - ISBD, CCF, MARC-21, Dublin Core

Unit 5. Subject Cataloguing, Centralized Cataloguing and Cooperative Cataloguing

- ❖ Problems in assigning subject headings
- ❖ Methods of subject cataloguing : chain procedure and list of subject headings
- ❖ Tools for subject cataloguing - LCSH, Sear's list of subject headings, Authority lists
- ❖ Centralized cataloguing : Types, advantages and disadvantages
- ❖ Cooperative cataloguing : NPAC, union catalogues

Paper LIS1 C04- Information Processing Practice (Classification) (4 Credits)

- A. Dewey Decimal Classification (2 Credit)
- B. Universal Decimal Classification (2 Credit)

SECOND SEMESTER

Paper LIS2 C05- Information Processing Practice (Cataloguing) (4 Credits)

- ❖ Cataloguing of books and non book materials according to AACR-2

Paper LIS2 C06- Information and Communication (4 credits)

Unit 1. Introduction to Information and Communication

- ❖ Information : characteristics, nature, value and use of information
- ❖ Conceptual difference between data, information, knowledge, Wisdom
- ❖ Introduction to communication concepts, media, channels and systems
- ❖ Communication of information: information generation
- ❖ Classification of communication- formal and informal, oral and recorded, print and electronic
- ❖ Communication channels, models and barriers
- ❖ Trends in scientific communication

Unit 2. Information Science

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

Unit 3. Library and Society

- ❖ Genesis, characteristics and implication, of information society
- ❖ Changing role of library and information centres in society
- ❖ Information industry: generators, providers and intermediaries
- ❖ Intellectual Property Acts, Right to Information Act
- ❖ Concept of freedom, censorship, data security and fair use
- ❖ Internationals and national programme sand policies (NAPLIS)UAP, UBC
- ❖ Open Access Movement

Unit 4. Economics of Information

- ❖ Information as a resource
- ❖ Information audit
- ❖ Cost analysis of information systemsMarketing of information products and services

Unit 5. Knowledge Management

- ❖ Growth process of knowledge
- ❖ Role of library professionals in knowledge management

Paper LIS2 C07- Fundamentals of Information and Communication Technology Theory (4 Credits)

Unit 1. Computers: Architecture and Technology

- ❖ Basic computer architecture
- ❖ Types of computers
- ❖ Storage technology-Main memory, magnetic storage, optical storage
- ❖ Input / Output devices

Unit 2. Software

- ❖ Functions of software
- ❖ Types of software-System software, Application software
- ❖ System software-MS-DOS, Windows, UNIX, Linux
- ❖ Application software-DBMS, Word processor, Presentation software, Electronic spreadsheet

Unit 3. Programming

- ❖ Algorithm and Flow charts
- ❖ Types of programming-procedural language, Object oriented programming language, Special purpose language
- ❖ Generation of programming languages-Machine language, Assembly language, High level language, Fourth generation language, Natural language

Unit 4. Fundamentals of Communication Technology

- ❖ Communication Systems-Electrical communication, Optical communication, Radio communication, Satellite communication
- ❖ Signal, noise and attenuation-signal, Pure waves, complex signals, Attenuation
- ❖ Digital communication

Unit 5. Data processing

- ❖ File design, data files, records, fields
- ❖ File organization: Serial, sequential, direct access, index sequential and random access file organization
- ❖ Database: Concepts, organization and utility

Paper LIS 2 C08 : Information Sources (4 Credits)

Unit 1 Introduction to Information Sources

- ❖ Nature, evolution, functions, characteristics and importance of information sources
- ❖ Classification of information sources
- ❖ Print and non-print

Unit 2. Primary Sources

- ❖ Periodicals and e-journals
- ❖ Patents, technical reports, specification, standards
- ❖ Research reports, theses and dissertations
- ❖ Conference proceedings, trade literature
- ❖ Government publication.

Unit 3. Secondary and Tertiary Sources

- ❖ Bibliographies
- ❖ Indexing, abstracting and reviewing periodicals
- ❖ Dictionaries
- ❖ Encyclopedias
- ❖ Biographical Sources
- ❖ Geographical sources
- ❖ Statistical Sources
- ❖ Yearbooks and Almanacs
- ❖ Handbooks and manuals
- ❖ Current Information Sources
- ❖ Directories
- ❖ Union catalogues
- ❖ Bibliography of Bibliographies
- ❖ Guides to Literature

Unit 4. Electronic Resources

- ❖ Databases, and multimedia sources
- ❖ Online sources and vendors
- ❖ Search tools and techniques
- ❖ BIOSIS, PubMed, IEEE/IEE Electronic Library
- ❖ ACM Digital Library, EBSCO, ProQuest, Elsevier, Ingenta, J-Gate.

Unit 5. Project

- ❖ Evaluation of not less than 25 reference sources including electronic resources.

Paper LIS2 E01- Elective 1 Fundamentals of Information and Communication Technology Practice (4 Credits)

Unit 1. Windows

Unit 2. Linux

Unit 3. Word

Unit 4. Excel

Unit 5. Power point

THIRD SEMESTER

Paper LIS3 C09- Information Systems and Services (4 Credits)

Unit 1. Information Services and Products

- ❖ Concept, definition and types of reference service
- ❖ Reference interview and search techniques
- ❖ Concept, definition, need and trends of information services
- ❖ Need, techniques and evaluation of alerting services-CAS
- ❖ Referral service

Unit 2. Information Systems and their Services

- ❖ National and international systems and services- NISCAIR, DESIDOC, NASSDOC, SENDOC, UNISIST, INIS, AGRIS, MEDLARS, OCLC

Unit 3. Personalized Information Services

- ❖ Information Analysis Centre (IAC)
- ❖ Indexing and Abstracting Service
- ❖ Document Delivery Services
- ❖ Translation Service
- ❖ Reprographic Service
- ❖ Selective Dissemination of Information (SDI)

Unit 4. Information Users and their Needs

- ❖ Categories of information users
- ❖ Information needs: definition and types
- ❖ Information seeking behavior
- ❖ User studies-methods, techniques and evaluation

Unit 5. User Education

- ❖ Goals and objectives
- ❖ Techniques and methods

Paper LIS3 C10- Research Methodology (4 Credits)

Unit 1. Research

- ❖ Concept, meaning, need and process of research
- ❖ Types of research, fundamental, applied, Inter-disciplinary and multi-disciplinary approach

Unit 2. Research Design

- ❖ Conceptualization
- ❖ Types of research design
- ❖ Identification and formulation of problem
- ❖ Hypothesis: formulation and testing
- ❖ Literature search: print, non-print, electronic sources

Unit 3. Research Methods

- ❖ Scientific method
- ❖ Historical method
- ❖ Descriptive method
- ❖ Survey method
- ❖ Case Study method
- ❖ Experimental method
- ❖ Delphi method

Unit 4. Research Techniques and Tools

- ❖ Questionnaire

- ❖ Schedule
- ❖ Interview
- ❖ Observation
- ❖ Scales and check lists
- ❖ Records and reports
- ❖ Sampling techniques

Unit 5. Data Analysis, Interpretation, and Report Writing

- ❖ Tabulation and generalization
- ❖ Graphical presentation of data, bar diagram, graphs, histograms
- ❖ Structure of research report
- ❖ Style manual in general-MLA style manual in detail
- ❖ Current Trends in Library and Information Science Research

Paper LIS3 C11- Application of Information and Communication Technology in LIS -Theory (4 Credits)

Unit 1. Networks and Networking

- ❖ Computer networks - definition and examples
- ❖ Switching techniques-Circuit switching, packet switching, cell switching
- ❖ Network media-UTP, Optical fiber, Ethernet, Network Interface Cards, Hubs, Routers, Gateway, Modem
- ❖ Network types: LAN, PAN, CAN, MAN, WAN
- ❖ Wireless Networks: WiFi, WiMAX
- ❖ LAN topologies : bus, star, ring, tree, mesh and token ring networks

Unit 2. Internet: Basic features, Tools, Services and Utilities

- ❖ History and Development
- ❖ WWW, E-mail, FTP, Telnet, Mailing lists, Newsgroups, Video conferencing
- ❖ Search engines and Meta search engines
- ❖ Internet security, Firewall, Proxy servers
- ❖ Web 2.0 Technologies
- ❖ Semantic Web, Invisible Web and Deep Web
- ❖ Application of Internet in Library and Information work and services

Unit 3. Library Automation

- ❖ Planning and implementation
- ❖ House Keeping Operations-Acquisition, Cataloguing, Circulation, Serial Control, OPAC
- ❖ Integrated Library Management System
- ❖ Application of RFID in Libraries

Unit 4. Digital Libraries

- ❖ Introduction to digital libraries-concepts and issues
- ❖ Content creation - electronic documents, files and file formats
- ❖ Collection building-issues and challenges
- ❖ Metadata and Metadata Schemas
- ❖ Dublin Core
- ❖ Digital Library Software

Unit 5. Institutional Repositories

- ❖ Institutional repositories-concepts and issues
- ❖ Implementing institutional repositories

- ❖ Institutional repository software-Key features and functionality

Paper LIS3 E02- Elective 2: Statistics and Bibliometrics (4 Credits)

Unit 1. Basics of Statistics

- ❖ Nature and Scope of statistics
- ❖ Use of Statistics and libraries and Information centres

Unit 2. Presentation of Data

- ❖ Tabular, graphical and diagrammatic presentation
- ❖ Construction of freq tables, Graphs
- ❖ Measures of central tendency
- ❖ Measures of dispersion, skewness, kurtosis

Unit 3. Inferential Statistics

- ❖ Correlation
- ❖ Linear regression
- ❖ Chi-square test
- ❖ Z-test

Unit 4. Statistical Packages

- ❖ SPSS

Unit 5. Bibliometrics

- ❖ Bibliometrics-genesis, scope and definition, bibliometrics laws-Bradford's law, Zipf's law, and Lotka's law – Their application
- ❖ Citation analysis, Bibliographic coupling
- ❖ Growth and obsolescence of literature
- ❖ Definition, scope and genesis of scientometrics, informetrics and webometrics.

Paper LIS3 E03- Elective Paper 3: Technical Communication (4 Credits)

Unit 1. Technical Writing

- ❖ Characteristic features of technical writing. Audience research
- ❖ Language as a medium for communication of thought, readability and text

Unit 2. Abstracting

- ❖ Types of abstracts
- ❖ Guidelines in preparing abstracts

Unit 3. Repackaging and Consolidation

- ❖ Content analysis
- ❖ Repackaging, formatting, Consolidation.

Unit 4. Products of Technical Writings

- ❖ Preparation of popular articles, technical reports, review articles, digests, briefs and reports and state of the Art report

Unit 5. Mechanics of Writing

- ❖ Preparation of Common problems in spelling grammar usage and punctuation
- ❖ Style manual-Chicago Manual APA, and MLA Style manuals
- ❖ Copy editing and proof reading

FOURTH SEMESTER

Paper LIS4 C12- Information Processing and Retrieval (4 Credits)

Unit 1. Information Retrieval Systems

- ❖ Information Retrieval Systems - Purpose, Functions and Components
- ❖ Comparison with Shannon & Weaver model
- ❖ Search strategy-formulation of strategy for on-line search

Unit 2. Indexing Systems

- ❖ Indexing - Meaning, Purpose and Need
- ❖ Principles of subject indexing
- ❖ Indexing models
- ❖ Pre coordinate indexing a post coordinate indexing.
- ❖ Key word indexing KWIC & KWOC
- ❖ Citation indexing –Science Citation Index and Social Science Citation Index

Unit 3. Vocabulary Control

- ❖ Vocabulary control - Meaning and importance
- ❖ Vocabulary Control Tools - Subject heading Lists, Thesaurus, Thesaurofacet, Classarus
- ❖ Thesaurus - its purpose, structure and format
- ❖ Thesaurus construction techniques

Unit 4. Evaluation of Information Retrieval Systems

- ❖ Criteria for evaluation
- ❖ Design of evaluation programmes
- ❖ Steps of evaluation
- ❖ Evaluation projects –Aslib- Cranfield studies, Medlars Evaluation Project

Unit 5. Natural Language Processing (NLP)

- ❖ Concept of NLP
- ❖ Application of NLP in IRS

Paper LIS4 C13- Application of Information and Communication Technology in LIS -Practice (4 Credits)

- ❖ Unit 1. Library Automation Packages- Koha, SOUL
- ❖ Unit 2. Digital Library Software-Greenstone
- ❖ Unit 3. Institutional Repository Software-DSpace
- ❖ Unit 4. Library website / portal design
- ❖ Unit 5. Internet tools / services / utilities

Paper LIS4 E04- Elective Paper 4: Organizing Information Resources – Practice (4 Credits)

- ❖ Creating metadata records according Dublin Core and other specialized metadata standards for a variety of electronic resources. Using online ontologies for subject indexing.

| Semester | Course No. | Course Title | Duration of Exam | Marks | | | Credits |
|------------|------------|---|------------------|-------|------|-------|----------------|
| | | | | I.A | Exam | Total | |
| First | LIS C01 | Library, Information and Society | 3 Hrs | 20 | 80 | 100 | 4 |
| | LIS C02 | Library Management | 3 Hrs | 20 | 80 | 100 | 4 |
| | LIS C03 | Information Processing Theory (Classification and Cataloguing) | 3 Hrs | 20 | 80 | 100 | 4 |
| | LIS C04 | Information Processing Practice (Classification) | 3 Hrs | 20 | 80 | 100 | DDC 3 UDC 1 |
| Second | LIS2 C05 | Information and Communication | 3 Hrs | 20 | 80 | 100 | 4 |
| | LIS2 C06 | Planning of Libraries and Information Centers | 3 Hrs | 20 | 80 | 100 | 4 |
| | LIS2 C07 | Information Processing Practice (Cataloguing) | 3 Hrs | 20 | 80 | 100 | 3 |
| | LIS2 C08 | Information Sources | 3 Hrs | 20 | 80 | 100 | 3 |
| | LIS2 E01 | Elective | 3 Hrs | 20 | 80 | 100 | 4 |
| Internship | | | | 20 | 30 | 50 | 2 |
| Third | LIS3 C09 | Information Systems and Services | 3 Hrs | 20 | 80 | 100 | 4 |
| | LIS3 C10 | Information Processing and Retrieval Research | 3 Hrs | 20 | 80 | 100 | 3 |
| | LIS3 C11 | Information Technology in Libraries (Theory) | 3 Hrs | 20 | 80 | 100 | 3 |
| | LIS3 C12 | Application of Information and Communication Technology in LIS (Practice) | 3 Hrs | 20 | 80 | 100 | 3 |
| | LIS3 E02 | Elective | 3 Hrs | 20 | 80 | 100 | 4 |
| Fourth | LIS4 C13 | Research Methodology | 3 Hrs | 20 | 80 | 100 | 3 |
| | LIS 4 E03 | Elective | 3 Hrs | 20 | 80 | 100 | 4 |
| | LIS4 E04 | Elective | 3 Hrs | 20 | 80 | 100 | 4 |
| | LIS4 C13 | Dissertation and Viva Voce | | | 150 | 150 | 8 |
| | | Total | | 360 | 1540 | 1900 | 72 |