



MUSLIM ARTS COLLEGE

(Autonomous)

(Accredited by NAAC with B+ grade & Affiliated to Manonmaniam Sundaranar University,
Tirunelveli; Recognized US 2(f) 12 (B) of UGC Act.)

Thiruvithancode, Kanyakumari District, Tamil Nadu - 629174.

DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE

CBCS SYLLABUS

Learning Outcome-based Curriculum Framework for

LIBRARY AND INFORMATION SCIENCE (M.Lib.I.Sc.)

*Applicable for students admitted from June 2026 as per the Resolutions of the Academic Council Meeting held
on 01.06.2026*

Vision

- To be a leading programme that empowers individuals with knowledge and skills in modern information management, promoting creativity and lifelong learning in a dynamic information environment.

Mission

- To provide comprehensive and forward-thinking education in information science
- To develop skills in organizing, managing, and disseminating information effectively
- To promote critical thinking and technological proficiency
- To prepare professionals who enhance information access and community development

Academic and Professional Attributes of the Graduates

1. **Disciplinary Knowledge** – Demonstrate comprehensive knowledge of Library and Information Science principles, theories, practices, and emerging technologies.
2. **Information Organization and Management** – Apply professional skills in knowledge organization, information retrieval, cataloguing, classification, indexing, and digital resource management.
3. **Research and Analytical Skills** – Employ research methods, critical thinking, and analytical techniques to solve problems and contribute to the advancement of Library and Information Science.
4. **Information and Digital Literacy** – Utilize information and communication technologies, library automation tools, digital libraries, databases, and electronic resources effectively.
5. **Communication and User Services** – Communicate effectively with diverse user communities and provide high-quality reference, information, and user education services.
6. **Professional Ethics and Social Responsibility** – Uphold ethical values, intellectual property rights, professional standards, inclusiveness, and social responsibility in library and information services.
7. **Leadership and Management** – Demonstrate leadership, teamwork, decision-making, and managerial competencies in planning, organizing, and administering library and information centres.
8. **Innovation and Lifelong Learning** – Adapt to technological advancements, promote innovation, engage in continuous professional development, and support lifelong learning.
9. **Community Engagement** – Contribute to literacy, knowledge dissemination, community development, and equitable access to information through library extension and outreach programmes.
10. **Global Perspective** – Understand national and international trends, policies, standards, and best practices in Library and Information Science to function effectively in a global knowledge society.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

PEOs	Upon completion of the M.Lib.I.Sc. (Master of Library and Information Science) Degree Programme, graduates are expected to	Mapping with Mission
PEO1	Demonstrate advanced knowledge in Library and Information Science, including knowledge organization, information retrieval, library management, digital libraries, library automation, electronic resource management, and emerging information technologies to pursue successful professional careers and higher studies.	M1, M2, M3
PEO2	Apply analytical thinking, research methodologies, information organization techniques, information and communication technologies, and modern library management tools to provide innovative information services and solve complex problems in libraries and information centres.	M2, M3, M4
PEO3	Exhibit professional ethics, leadership, teamwork, effective communication, and social responsibility while managing library and information services and promoting equitable access to knowledge and information.	M3, M4, M5
PEO4	Engage in lifelong learning, research, innovation, entrepreneurship, and continuous professional development to adapt to emerging technologies, global information trends, and evolving knowledge environments in Library and Information Science.	M1, M4, M5

Programme Outcomes (POs)

POs	Upon successful completion of the M.Lib.I.Sc. (Master of Library and Information Science) Degree Programme, students will be able to	Mapping with PEOs
PO1: Advanced Disciplinary Knowledge	Demonstrate advanced knowledge of Library and Information Science, including knowledge organization, information retrieval, library automation, digital libraries, electronic resource management, information technologies, and research methodologies.	PEO1
PO2: Critical Thinking and Analytical Skills	Analyze complex information problems, evaluate information resources, and apply critical thinking and analytical techniques to provide effective library and information services.	PEO1, PEO2
PO3: Research and Innovation	Apply research methods, statistical tools, and innovative approaches to conduct research and contribute to the advancement of Library and Information Science.	PEO2, PEO4
PO4: Professional Competence	Demonstrate professional competence in cataloguing, classification, indexing, metadata creation, digital resource management, library automation, and information service delivery.	PEO1, PEO2
PO5: Communication and Interpersonal Skills	Communicate effectively with users, professionals, and stakeholders through oral, written, and digital communication while providing user-centered	PEO3

	information services.	
PO6: Ethics and Social Responsibility	Uphold professional ethics, intellectual property rights, inclusiveness, and social responsibility in managing and disseminating information resources.	PEO3
PO7: Digital and Technological Competence	Utilize modern information and communication technologies, integrated library management systems, digital repositories, databases, and emerging technologies to enhance library services.	PEO1, PEO2, PEO4
PO8: Leadership and Teamwork	Demonstrate leadership, teamwork, managerial abilities, and decision-making skills in planning, organizing, and administering library and information centres.	PEO3, PEO4
PO9: Lifelong Learning	Engage in lifelong learning, continuous professional development, and self-directed learning to adapt to technological advancements and evolving information environments.	PEO4
PO10: Global Perspective	Apply national and international standards, policies, and best practices in Library and Information Science to contribute effectively to the global knowledge society.	PEO3, PEO4

Programme Specific Outcomes (PSOs)

PSOs	Upon successful completion of the M.Lib.I.Sc. (Master of Library and Information Science) Degree Programme, students will be able to	Mapping with POs
PSO1	Demonstrate advanced proficiency in knowledge organization, cataloguing, classification, indexing, metadata creation, and information retrieval systems to organize and provide efficient access to library resources.	PO1, PO2, PO4, PO7
PSO2	Apply modern library management principles, information services, library automation, digital library technologies, and electronic resource management to deliver user-centered library and information services.	PO1, PO4, PO5, PO7, PO8
PSO3	Utilize research methodologies, information and communication technologies, bibliometric techniques, digital repositories, and emerging information technologies to support research, innovation, and knowledge management.	PO2, PO3, PO4, PO7, PO9
PSO4	Demonstrate professional ethics, leadership, project management, and decision-making skills in planning, organizing, and administering library and information centres.	PO5, PO6, PO8, PO10
PSO5	Promote lifelong learning, information literacy, community engagement, and equitable access to information by adopting national and international standards and best practices in Library and Information Science.	PO6, PO8, PO9, PO10

Mapping of Programme Outcomes (POs) and Programme Specific Outcomes (PSOs)

POs / PSOs	PSO1	PSO2	PSO3	PSO4	PSO5
PO1: Advanced Disciplinary Knowledge	3	3	2	2	2
PO2: Critical Thinking and Analytical Skills	3	2	3	2	2
PO3: Research and Innovation	2	2	3	3	2
PO4: Professional Competence	3	3	3	2	2
PO5: Communication and Interpersonal Skills	2	3	2	3	2
PO6: Ethics and Social Responsibility	1	2	2	3	3
PO7: Digital and Technological Competence	3	3	3	2	2
PO8: Leadership and Teamwork	2	3	2	3	3
PO9: Lifelong Learning	2	2	3	2	3
PO10: Global Perspective	1	2	2	3	3

•3 – High Correlation •2 – Moderate Correlation •1 – Low Correlation

COURSES OFFERED

SEMESTER I

Part	Course Code	Title of the Course	Credits	Hours / Week
Core Course -I	NMLS11	Research Methods	4	6
Core Course - II	NMLS12	Electronic Resources Management	4	6
Core Course - III	NMLS13	Academic and Research Librarianship	4	6
Core Course -PI	NMLSP1	Applications of ICT in Libraries	4	6
Elective Course - I	NELS11	Metrics Study	4	3
Elective Course - II	NELS12	Information and Communication Technology	2	3
Internship/ Industrial Activity	NMLS1I/NMLS1F	Internship and Field Work Project (Report & Viva)		
Total			22	30

FIRST YEAR - SEMESTER I

CORE I - RESEARCH METHODS

Subject Code	Category	L	T	P	S	Credits	Inst. Hours	Marks		
								CIA	External	Total
NMLS11	Core	Y	Y	-	-	4	5	25	75	100

Learning Objectives

The course aims to:

1. To develop a research orientation among the students and acquaint them with fundamentals of research methods.
2. The course aims at introducing them to the basic concepts used in research and to scientific social research methods and their approach.
3. It includes discussions on sampling techniques, research design, techniques of analysis, research report writing methods and teaches how to write a research proposal.

Course Outcomes

Upon successful completion of the course, students will be able to:

CO No.	Course Outcomes	BT Level
CO1	Explain the fundamental concepts, principles, types, and significance of research and identify appropriate research problems in Library and Information Science.	K2
CO2	Apply suitable research designs, sampling techniques, hypothesis formulation, and data collection methods to conduct systematic research studies.	K3
CO3	Analyze qualitative and quantitative data using appropriate statistical tools and software such as SPSS for research in Library and Information Science.	K4
CO4	Evaluate research findings, interpret data, and prepare research reports using standard citation styles and ethical research practices.	K5
CO5	Design and develop research proposals and conduct independent research by applying scientific methods and contemporary research trends in Library and Information Science.	K6

Bloom's Taxonomy Levels

K1 – Remember, **K2** – Understand, **K3** – Apply, **K4** – Analyse, **K5** – Evaluate, **K6** – Create

Course Content

Units	Contents	No. of Hours
I	Basics of Research: Research Meaning, Fundamental of Research Concept, Types and Significance – Research Problem – Identification, Selection and Formulation – Literature Review – Sources, Process, and Limitations – Logic and Scientific Method.	15
II	Research Design: Definition, Need, Types and Components – Hypothesis – Definition, Formulation, Types and Testing – Sampling – Concept and Need of study population and Sampling, Types of Sampling Techniques – Probability and Non- Probability, Derivation of Sample, Sample Bias and Error – Preparation of a Research Proposal –	15

	Components and Steps.	
III	Research Methods: Survey, Experimental, Case-study, Historical, and Scientific – Sources of Data – Primary, Secondary, and Tertiary – Data Collection Tools - Questionnaire, Interview, Observation, Delphi – Measures and Scaling Techniques.	15
IV	Tools for Research: Need and Importance, Descriptive and Inferential Statistics – Measures of Central Tendency – Standard Deviation – T-Test, Chi-Square, ANOVA, Correlation Analysis – Introduction to SPSS and its applications.	15
V	Presentation and Reporting: Presentation of Data-Tables, Charts and Figures- Interpretation, Inferences-Deductive and Inductive- Report Writing- Components and Evaluation of a Research Report- Style Manuals- Chicago, MLA, APA – Introduction to Reference Manager – Ethics in Research and Publication. Trends in Library and Information Science Research-Metric Studies in LIS.	15
	Total	75

S. No.	Text Book
1	Goode, W.J & Hatt, P.K (1989). Method of Social Research. McGraw Hill. Auckland.
2	Krishna Kumar (1992).Research methods in library in social science. Vikas, New Delhi.
3	Charles, H. et.al (1993). Research Methods in Librarianship: Techniques and Interpretations. New Delhi, Sage.

S. No.	Reference Books
1	Auger (1961).Current trends in scientific research. UNESCO, Paris.
2	Downs, R.B & Down, E (1966). How to do library research. University of Illinois Press, Urbana.
3	Gopal, M.H (1990). An introduction to research procedure in social sciences. Asia, Bombay.

S. No.	Web Sources
1	https://onlinecourses.swayam2.ac.in/cec20_mg14/preview
2	https://www.spss.com
3	https://apastyle.apa.org
4	https://www.chicagomanualofstyle.org
5	https://style.mla.org

Mapping Of Course Outcomes With Programme Outcomes (POs)

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	2	2	2	2	2	2	1	1
CO2	3	3	3	3	3	3	3	3	2	2
CO3	3	3	3	3	3	3	2	2	2	3
CO4	3	3	3	3	2	2	3	3	3	3
CO5	3	3	3	3	3	3	3	3	3	3

3 – Strong, 2 – Medium, 1 – Low

Mapping with Programme Specific Outcomes

CO / PSO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	1	1
CO2	3	3	3	2	2
CO3	3	3	3	2	2
CO4	3	3	3	3	2
CO5	3	3	3	3	3
Weightage	15	14	14	11	10
Weighted Percentage of Course Contribution to PSOs	3.0	2.8	2.8	2.2	2.0

Mapping Scale: 3 – Strong Correlation, 2 – Moderate Correlation, 1 – Low Correlation

SEMESTER I

CORE COURSE II: ELECTRONIC RESOURCES MANAGEMENT

Course Code:

Subject Code	Category	L	T	P	S	Credits	Inst. Hours	Marks		
								CIA	External	Total
NMLS12	Core	Y	Y	-	-	4	5	25	75	100

Learning Objectives

The course aims to:

1. To learn about selection, licensing, and evaluation of electronic resources.
2. To critically examine the laws and policies that made an impact on electronic resource management.
3. To know the critical technologies and standards behind electronic resource management.

Course Outcomes (COs)

Upon successful completion of the course, students will be able to:

CO No.	Course Outcomes	BT Level
CO1	Identify different types of e-resources	K1
CO2	Known the selection process of e-resources.	K2
CO3	Build good collection of e-resources.	K6
CO4	Evaluate web resources.	K5
CO5	Create good collection of e-resources for the demand of users.	K6

Bloom's Taxonomy Levels

K1 – Remember, K2 – Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create

Course Content

Units	Contents	No. of Hours
I	Electronic Resources Overview Electronic Resources: Overview, concept, definition, evolution, need, characteristics, benefits and drawbacks – E-Resource life cycle.	15
II	Electronic Resource Management Systems (ERMS) Selecting, acquiring/ subscription/ purchasing, implementation, evaluation and renewing electronic resources/ cancellation. Techniques for Electronic Resource Management (TERMS), Strategic planning for ERM – Media and Format Migration	15
III	Economics of e-Resources Economics of E-resources – Pricing. Access management of E-resources: authentication and access management of e-resources. Subscription models: copyright, licenses and tactics and terms in the negotiation of e-resources licenses	15
IV	Collection Development Process Formulating policy, budgeting, evaluation of e-resources. Strategic planning for ERM, Electronic r-resources usage statistics, standards and guidelines (SUSHI – COUNTER) – LOCKS, CLOCKS	15
V	Consortia Concept, need, purpose & limitations; E-ShodhSindhu: Consortium for Higher Education Electronic Resources. ERMS tools – commercial, in-house, Open source - Recent Trends in ERMS: Future of ERMS, hardware and software changes, user behavior and expectations	15
	Total	75

S. No.	Text Book
1	Dhiman, A. K. and Yashoda Rani. (2005). Learn Library and Society. Ess Ess Publications.
2	Emery, J., and Stone, G. (2013). Techniques for Electronic Resource Management (Library Technology Reports). Chicago: Amer Library Assn.
3	Hawthorne, D. (2008). History of electronic resources. In Electronic resource management in libraries: Research and practice. IGI Global
4	Patra, N. K. (2014). Electronic Resource Management: A Case Study of Management School Libraries In India. Sampalpur: Sampalpur University.

S. No.	Reference Books
1	Pandey, D. K. (2013). Library and Information Science. Atlantic
2	Jennings, L. (2009). Electronic resources management for electronic resources librarians: a bibliography. Bath: University of Bath.
3	Yu, H., & Breivold, S. (2008). Electronic resource management in libraries research and practice. Hershey: Information Science Reference

S. No.	Web Resources
1	https://www.mooc-list.com/tags/e-resources
2	https://ess.inflibnet.ac.in
3	https://nlist.inflibnet.ac.in
4	https://www.oclc.org

Mapping with Programme Outcomes

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	3	3	3	3	3	3	2	3
CO2	3	3	3	2	3	3	3	3	3	3
CO3	3	3	3	3	3	3	3	2	3	3
CO4	2	3	3	3	3	3	3	3	3	3
CO5	1	2	3	3	2	1	1	3	3	3

3 – Strong, 2 – Medium, 1 - Low

Mapping with Programme Specific Outcomes

CO / PSO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	1	1
CO2	3	3	3	2	2
CO3	3	3	3	2	2
CO4	3	3	3	3	2
CO5	3	3	3	3	3
Weightage	15	14	14	11	10
Weighted Percentage of Course Contribution to PSOs	3.0	2.8	2.8	2.2	2.0

Mapping Scale: 3 – Strong Correlation, 2 – Moderate Correlation, 1 – Low Correlation

FIRST YEAR - SEMESTER I**CORE III - ACADEMIC AND RESEARCH LIBRARIANSHIP**

Subject Code	Category	L	T	P	S	Credits	Inst. Hours	Marks		
								CIA	External	Total
NMLS13	Core	Y	Y	-	-	4	6	25	75	100

Learning Objectives

The course aims to:

1. Provide knowledge on academic and research library systems.
2. To educate students on management of academic and research libraries
3. To educate students on sources and services in academic and research libraries.

Course Outcomes

Upon successful completion of the course, students will be able to:

CO No.	Course Outcomes	BT Level
CO1	Explain the concepts, objectives, functions, and types of academic and research libraries and identify the information needs of their users.	K2
CO2	Apply principles of planning, collection development, human resource, financial, and network management in academic and research libraries.	K3
CO3	Analyze the information services, documentation services, ICT-enabled services, and research support services provided by academic and research libraries.	K4
CO4	Evaluate the impact of globalization, technological advancements, and change management practices on academic and research library services.	K5
CO5	Design innovative digital library services, institutional repositories, and e-resource management strategies to support academic and research communities.	K6

Bloom's Taxonomy Levels

K1 – Remember, **K2** – Understand, **K3** – Apply, **K4** – Analyse, **K5** – Evaluate, **K6** – Create

Course Content

Units	Contents	No. of Hours
I	Academic and Research Libraries and their Users: Academic and Research librarianship – definition, meaning, importance, functions and types; Users of academic and research librarianship – types of users and their needs, user study and user education; Structure and hierarchies of academic and research librarianship; Role of UGC, AICTE, NCTE and other bodies in academic and research library development; Changing role of academic and research libraries – National and global scenario, Academic and Research Library Development in India.	15
II	Management of Academic and Research Libraries: Records management and library planning; Collection Development/Resource Optimization; Human Resource Management; Financial Management; Library Co-operative Organizations and Network services.	15

III	Services in Academic and Research Libraries: Traditional services; Documentation services; ICT enabled services; Advanced Scholars specific services; and Reference and information services to Research Scholars.	15
IV	Change Management in Academic and Research Libraries: Effects of Globalization on Libraries; Generation Gap due to Knowledge based society; Change of academic and research environment and management style; Change of users interest and learning techniques; and Leadership style and Qualities of Librarians.	15
V	Introduction of New Digital Applications in Academic and Research Libraries: Application of Academic and Research Library 2.0; International academic and research library scenario; Academic and Research Libraries Repositories; Library e-resource management, policy and programmes	15
	Total	75

S. No.	Text Book
1	Ranganathan, S. R. (2008). Library Manual, for School, college and Public Libraries (with Revised Examples of subject classification). Ess Ess Publications.
2	Kawatra, P. S. (1996). A Dictionary of acronyms and abbreviations in education, information and computer sciences. New Delhi: Ess Ess Publications.
3	Lal, C and Kumar, K. Understanding Basics of Library and information science Library. Ess Ess Publications.

S. No.	Reference Books
1	Patricia, Potter Wilson and Roger, Leslie (2002). Center Stage, Library Programs that Inspire Middle School Patrons. Colorado, A Division of Greenwood publishing Group
2	Pushplata, Srivastava (2008). Copyright in Academic Libraries in Digital Environment. Ess Ess Publications, New Delhi.
3	Rachel, Singer Gordon (2009). Information Tomorrow, Reflections on Technology and the Future of public and academic libraries. Ess Ess Publications, New Delhi.
4	Shilpa Satish Waghchoure (2016). Best Practices in Academic Libraries. Ess Ess Publications, New Delhi.

S. No.	Web Sources
1	http://ebooks.lpude.in
2	http://egyankosh.ac.in
3	http://dlis.du.ac.in

Mapping with Programme Outcomes

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	3	2	3	3	3	3	3	3
CO2	3	2	3	3	3	3	3	3	3	3
CO3	2	3	3	1	3	3	3	1	1	3
CO4	3	3	2	3	3	2	3	3	3	3
CO5	3	3	3	3	3	3	3	1	3	3

3 – Strong, 2 – Medium, 1 – Low

Mapping with Programme Specific Outcomes

CO / PSO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	1	1
CO2	3	3	2	2	2
CO3	3	3	3	2	2
CO4	3	3	3	3	2
CO5	3	3	3	3	3
Weightage	15	14	13	11	10
Weighted Percentage of Course Contribution to PSOs	3.0	2.8	2.6	2.2	2.0

Mapping Scale: 3 – Strong Correlation, 2 – Moderate Correlation, 1 – Low Correlation

FIRST YEAR - SEMESTER I

CORE COURSE PI- APPLICATION OF ICT IN LIBRARIES- PRACTICAL

Subject Code	Category	L	T	P	S	Credits	Inst. Hours	Marks		
								CIA	External	Total
NMLSP1	Core	-	-	Y	Y	4	4	25	75	100

Learning Objectives

The course aims to:

1. To enable students to gain hands on experience using software packages.
2. To design and develop database using any software packages available in the market
3. To design and develop digital collections and management systems in library.

Course Outcomes

Upon successful completion of the course, students will be able to:

CO No.	Course Outcomes	BT Level
CO1	Remember various library computerized services	K1
CO2	Make better use of human resources, by using computers to carry out routine functions of the library.	K6
CO3	Carry out digital collection using library digital management software	K5
CO4	To Generate different types of report using library management software	K6
CO5	Develop bibliographic information from WebOPAC, WorldCat, IndCat	K6

Bloom's Taxonomy Levels

K1 – Remember, **K2** – Understand, **K3** – Apply, **K4** – Analyse, **K5** – Evaluate, **K6** – Create

Course Content

S. No.	Contents	No. of Hours
I	Koha: Installation - Administration - Acquisition – Cataloguing -Patrons – Circulation – Serial Controls-Report Generation	15
	SOUL: Installation - Administration - Acquisition – Cataloguing -Patrons – Circulation – Serial Controls Report Generation	15
	Dspace: Installation of DSpace - Building digital collection Creating Metadata. Searching, Indexing. Modifying user interface	15
	Greenstone: Installation of Greenstone. Building digital collection Creating Metadata. Searching, Indexing. Modifying user interface	15
	Drupal: Installation of Drupal -Building digital collection Creating Metadata. Searching, Indexing. Modifying user interface	15
	Total	75

S. No.	Text Books
1	Amit Gupta and Savitra Sirohi (2010) Koha 3 Library Management System, Packt Publishing, ISBN: 9781849510820
2	Clayton, Marlene (2018). <i>Managing library automation</i> . 2nd ed. London:
S. No.	Reference Works
1	Mishra, Vinod Kumar (2016). <i>Basics of library automation, Koha library management software and data migration: Challenges with case studies</i> . New Delhi: EssEss Publications.
2	Theresabala, T, Ratnakumari, C & Rani, B.A, (2001) <i>Information technology, and library automation</i> , Common wealth Publishers pvt. Ltd
3	Poliwali, R.S, (2001) <i>Information resources for library and information technology</i> , Navug Books International.
S. No.	Web Sources (URL)
1	www.inflibnet.ac.in
2	http://debian.koha-community.org/koha
3	http://soul.inflibnet.an.in/downloads.php
4	http://wiki.lyrasis.org/display/DSDOC6x/Installing+DSpace
	http://www.greenstone.org/download

Mapping Of Course Outcomes With Programme Outcomes (POs)

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	2	2	2	2	2	2	1	1
CO2	3	3	3	3	3	3	3	3	2	2
CO3	3	3	3	3	3	3	2	2	2	3
CO4	3	3	3	3	2	2	3	3	3	3
CO5	3	3	3	3	3	3	3	3	3	3

3 – Strong, 2 – Medium, 1 - Low

Mapping Of Course Outcomes With Programme Specific Outcomes (PSOs)

CO / PSO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	1	1
CO2	3	3	3	2	2
CO3	3	3	3	3	2
CO4	3	3	3	3	2
CO5	3	3	3	3	3
Weightage	15	14	14	12	10
Weighted Percentage of Course Contribution to PSOs	3.0	2.8	2.8	2.4	2.0

Mapping Scale: 3 – Strong Correlation, 2 – Moderate Correlation, 1 – Low Correlation

FIRST YEAR - SEMESTER I
ELECTIVE COURSE I– METRICS STUDIES

Subject Code	Category	L	T	P	S	Credits	Inst. Hours	Marks		
								CIA	External	Total
NELS11	Elective -I	Y	Y	-	Y	4	3	25	75	100

Learning Objectives

The course aims to:

1. **Introduce** students to the concepts, scope, evolution, and applications of metric studies in Library and Information Science.
2. **Develop** an understanding of bibliometric, scientometric, informetric, webometric, and altmetric techniques for evaluating scholarly communication.
3. **Explain** the major bibliometric laws, citation analysis methods, and research impact indicators used in evaluating publications, authors, journals, and institutions.
4. **Enable** students to interpret quantitative and qualitative research metrics for research assessment and decision-making.
5. **Provide** practical knowledge of modern research evaluation tools and emerging trends in metrics studies.

Course Outcomes

Upon successful completion of the course, students will be able to:

CO No.	Course Outcomes	BT Level
CO1	Explain the concepts, evolution, types, and applications of metric studies in Library and Information Science.	K2
CO2	Apply bibliometric laws and growth models to analyze scholarly literature and information dissemination.	K3
CO3	Analyze citation patterns, bibliographic coupling, co-citation, and journal citation reports for research evaluation.	K4
CO4	Evaluate the research impact of authors, journals, and institutions using bibliometric and scientometric indicators.	K5
CO5	Design and interpret research assessment studies using modern metrics, web impact measures, and altmetric tools.	K6

Bloom's Taxonomy Levels

K1 – Remember, **K2** – Understand, **K3** – Apply, **K4** – Analyse, **K5** – Evaluate, **K6** – Create

Course Content

Unit	Contents	No. of Hours
I	Metrics Evaluation: Concept, Evolution & Definitions – Classifications, Librametry, Bibliometrics, Scientometrics, Informetrics, Cybermetrics, Webmetrics, Wikimetrics, Open source metrics, Journals metrics and Alt metrics.	6
II	Growth of Literature: Growth of Literature – Information Explosion/Publication Explosion	6
III	Metric Laws: Bibliometrics Laws – Bradford, Zipf, Lotka, Price, Circulation Theory	6
IV	Citation Analysis: Citation Analysis – Forms of citation – Self Citation, Bibliographic coupling, Co-Citation, Journal Citation Report.	6
V	Indicators: Quantitative and qualitative indicators. Hi-Index, G-Index, Cited-Half life, citing half life. i10index, i20index science indicators, web impact assessment link analysis.	6
	Total	30

S. No.	Text Book
1	Author Co-citation Analysis: Quantitative Methods for Mapping the International Structure of an Academic Discipline , 2008
2	De Bellis, Nicola. 2009. Bibliometrics and citation analysis: From the Science Citation Index to cybermetrics. Lanham, MD: Scarecrow Press.
3	Bibliometrics: New Dimensions and Latest Trend, Srivastava R, Alfa Publications 2011.

S. No.	Reference Books
1	Bibliometric and Citation Analysis from the Science Citation Index to Cybermetrics, 2009
2	Measuring Academic Research: How to Undertake a Bibliometric Study – 2009, Ana Abdres, Chendos Publishing

S. No.	Web Resources
1	https://www.scimagojr.com
2	https://journalinsights.elsevier.com
3	https://www.dimensions.ai
4	https://www.altmetric.com
5	https://plumanalytics.com

MAPPING OF COURSE OUTCOMES WITH PROGRAMME OUTCOMES (POs)

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	3	3	3	1	3	2	3	3	2
CO2	3	3	2	2	3	2	3	3	2	3
CO3	2	2	3	3	3	3	2	1	2	2
CO4	2	2	1	3	2	3	3	2	3	2
CO5	3	3	2	2	3	2	3	3	3	1

3 – Strong Correlation, 2 – Moderate Correlation, 1 – Low Correlation.

MAPPING OF COURSE OUTCOMES WITH PROGRAMME SPECIFIC OUTCOMES (PSOs)

CO / PSO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	1	1
CO2	3	3	3	2	2
CO3	3	3	3	3	2
CO4	3	3	3	3	2
CO5	3	3	3	3	3
Weightage	15	14	14	12	10
Weighted Percentage of Course Contribution to PSOs	3.0	2.8	2.8	2.4	2.0

3 – Strong Correlation, 2 – Moderate Correlation, 1 – Low Correlation

FIRST YEAR – SEMESTER I

ELECTIVE COURSE-II: INFORMATION AND COMMUNICATION TECHNOLOGY

Subject Code	Category	L	T	P	S	Credits	Inst. Hours	CIA	External	Total
NELS12	Elective- II	Y	Y	-	-	2	3	25	75	100

Learning Objectives

The course aims to:

1. **Provide** fundamental knowledge of Information and Communication Technology (ICT) and its applications in library and information centres.
2. **Develop** an understanding of computer systems, networking, library automation, and integrated library management systems (ILMS).
3. **Introduce** database management systems, digital libraries, and institutional repositories for effective information organization and access.
4. **Familiarize** students with emerging ICT applications such as artificial intelligence, cloud computing, and big data in modern libraries.
5. **Enable** students to apply ICT tools and technologies to enhance library services, information retrieval, and resource management.

Course Outcomes

Upon successful completion of the course, students will be able to:

CO No.	Course Outcomes	BT Level
CO1	Explain the fundamentals of Information and Communication Technology, computer systems, operating systems, and networking in libraries.	K2
CO2	Apply library automation techniques and Integrated Library Management Systems (ILMS) for efficient library operations.	K3
CO3	Analyze the role of database management systems, digital libraries, and institutional repositories in information organization and retrieval.	K4
CO4	Evaluate the applications of emerging technologies such as artificial intelligence, cloud computing, and big data in library and information services.	K5
CO5	Design ICT-enabled library services and digital information systems to improve access, management, and dissemination of information resources.	K6

Bloom's Taxonomy Levels

K1 – Remember, **K2** – Understand, **K3** – Apply, **K4** – Analyse, **K5** – Evaluate, **K6** – Create

Course Content

Unit	Contents	No. of Hours
I	Computer Fundamentals Operating Systems Networking	6
II	Library Automation Integrated Library Management Systems (ILMS)	6
III	Database Management Systems	6
IV	Digital Libraries Institutional Repositories	6
V	Artificial Intelligence Applications Cloud Computing Big Data in Libraries	6
	Total	30

S. No.	Text Books
1	Bansode, S. Y. (2017). <i>Information and Communication Technology in Library and Information Science</i> . New Delhi: Ess Ess Publications.
2	Rowley, J. (2006). <i>The Electronic Library</i> (4th ed.). London: Facet Publishing.

S. No.	Reference Books
1	Haravu, L. J. (2018). <i>Library Automation: Design, Principles and Practice</i> . New Delhi: Allied Publishers.
2	Senn, J. A. (2004). <i>Information Technology: Principles, Practices and Opportunities</i> (3rd ed.). Pearson Education.
3	Stallings, W. (2019). <i>Data and Computer Communications</i> (11th ed.). Pearson.

S. No.	Web Resources
1	https://www.inflibnet.ac.in
2	https://www.ndl.gov.in
3	https://www.dspace.org
4	https://koha-community.org
5	https://www.openarchives.org

MAPPING OF COURSE OUTCOMES WITH PROGRAMME OUTCOMES (POs)

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	2	2	2	2	1	2	1	1	2
CO2	3	3	2	3	2	2	3	2	2	2
CO3	3	3	3	3	2	2	3	2	2	2
CO4	3	3	3	3	3	3	3	2	2	3
CO5	3	3	3	3	3	3	3	3	3	3

Mapping Scale: 3 – Strong Correlation, 2 – Moderate Correlation, 1 – Low Correlation

MAPPING OF COURSE OUTCOMES WITH PROGRAMME SPECIFIC OUTCOMES (PSOs)

CO / PSO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	1	1
CO2	3	3	3	2	2
CO3	3	3	3	3	2
CO4	3	3	3	3	2
CO5	3	3	3	3	3
Weightage	15	14	14	12	10
Weighted Percentage of Course Contribution to PSOs	3.0	2.8	2.8	2.4	2.0

Mapping Scale

3 – Strong Correlation, 2 – Moderate Correlation, 1 – Low Correlation