Department of Library and Information Science
Sikkim University

Revised Draft Syllabus

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

Session 2022-23

NAME OF PROGRAM: MASTER OF LIBRARY AND INFORMATION SCIENCE (M. Lib. I. Sc.)

As per statute No. 15.6 of Sikkim University, the Department of Library and Information is one of the 36 approved departments of the university. In the Sikkim state there is no teaching department, so the need has been felt to open the department in the Sikkim University which already stands approved in University Statutes as well as by other administrative bodies. It will be worthwhile department if opened with new curriculum to produce well trained skillful information professionals who could meet the needs of present and future libraries.

Objectives

1. To Impart quality LIS education to equip the students with the principles, theories and practices of LIS to manage present and future web-enabled libraries for better employability
2. To Make the students comfortable in applying IT applications in organization of knowledge and information wherever applicable
3. To adopt pedagogy of teaching and learning of Professional Courses combining theory and practice
4. To enhance the skills of the students for lifelong learning
5. To inculcate the ethos and culture of tribal and indigenous knowledge systems among the students

Admission Intake

Initially, in the beginning, only 10 students would be admitted in view of the employment opportunities and available physical facilities in the absence of permanent campus. However, number of students may be increased as per availability of facilities and job opportunities.

Admission Criteria

Admission criteria to M. Lib. I. Sc. (Master of Library and Information Science) will be as applicable to School of Professional Studies of the University.

Essential Qualification for Admission

Bachelor degree in any discipline with at least 50% marks.

Course Structure

Master of Library and Information Science is four semesters program. Each semester will be of 5 courses of 100 marks with 20 credits including practical. All courses shall be compulsory in all four semesters. However, in 3rd and 4th semester, some courses shall be introduced as **elective** courses. Each paper in the semester will have four units.

Examinations

Department will follow the university pattern of examinations with all practical as external. Only 20 marks will be for internal assignments or tests. During the semester teacher may give two assignments and conduct two tests, out of which, only highest obtained marks will be considered. Under the present system of examinations, all courses except practical and dissertation will be internally evaluated.

Educational Tour

Educational tour at the end of 2nd semester to visit the modern libraries of the country shall be compulsory. Students have to prepare a tour diary of libraries visited with full description of services etc.

Special Features of the Course

The course is being designed to give equal emphasis to theory and practice. The objective is that the students get fully trained in handling all the operations of the library with confidence and ability to handle any operation of the library small or big. The department is expected to function on the analogy of professional courses having both teaching and practice. The students will have theory classes in the morning. In the afternoon, students will work in the library under the supervision of the library staff for practical training. Since LIS curriculum is multi-disciplinary, so the collaboration of departments like Computer Applications, Management, Commerce and Economics would be sought for quality education.

Course Structure for Master of Library and Information Science
Sikkim University

First Semester

Course Code	Course Name	Course Type	L	T	P	Marks	IA/ Assign	Total Marks	Credits
LIS-PG-C101	Foundations of Library and Information Science	Core	4	-	0	80	20	100	4
LIS-PG-C102	Information Sources, Services and Literacy	Core	4	-	0	80	20	100	4
LIS-PG-C103	Information and Communication Technology Application	Core	2	-	4	40(T) 40(P)	20	100	4
LIS-PG-C104	Knowledge Organization and Arrangement: Library Classification (Theory)	Core	4	-	0	80	20	100	4
LIS-PG-C105P	Knowledge Organization and Arrangement: Library Classification (Practice)	Core	0	-	8	80	20 (Viva)	100	4
								Total Credits	20

Second Semester

Course Code	Course Name	Course Type	L	T	P	Marks	IA/ Assign	Total Marks	Credits
LIS-PG-C201	Library Management and Operations (Theory – 60; 20 Tour Diary)	Core	4	-	0	60 (T) + 20 (TD)	20	100	4
LIS-PG-C202	Digital Library and Content Management System	Core	2	-	4	40(T); 40(P)	20	100	4
LIS-PG-C203	Library Automation and Networking	Core	2	-	4	40(T); 40(P)	20	100	4
LIS-PG-C204	Knowledge Organization and Description: Library Cataloguing (Theory)	Core	4	-	0	80	20	100	4
LIS-PG-C205 P	Knowledge Organization and Description: Library Cataloguing (Practice)	Core	0	-	8	80	20 (Viva)	100	4
LIS-PG-NC206	Internship (Non-Credit)	Non-Credit	-	-	-	-	-	-	-
								Total Credits	20

Third Semester

Course Code	Description	Course Type	L	T	P	Marks	IA/ Assign	Total Marks	Credits
LIS-PG-C301	Information Storage and Retrieval	Core	4	-	0	80	20	100	4
LIS-PG-C302	Electronic Resource Management	Core	4	-	0	80	20	100	4
LIS-PG-C303	Research Methodology and **Scholarly Publishing**	Core	4	-	0	80	20	100	4
LIS-PG-C304	Research Data and Content Literacy	Core	2	-	4	40 (T) 40 (P)	20	100	4
Any One from the Discipline Specific Electives									
LIS-PG-E301	Social Science and Humanities Information Systems & Services (Discipline-Specific Elective - 1)	DSE	4	-	0	80	20	100	4
LIS-PG-E302	Engineering and Medical Sciences Information Systems & Services (Discipline-Specific Elective – 2)	DSE	4	-	0	80	20	100	4
LIS-PG-E303	Tribal Information, Archive, and Museum (Discipline-Specific Elective - 3)	DSE	4	-	0	80	20	100	4
								Total Credits	**20**

Fourth Semester

Course No	Description	Course Type	L	T	P	Marks	IA/ Assign	Total Marks	Credits
LIS-PG-C401	Knowledge Management and Information Systems	Core	4	-	0	80	20	100	4
LIS-PG-C402	Bibliometrics, Informetrics, and Scientometrics	Core	2	-	4	40 (T) 40 (P)	20	100	4
LIS-PG-C403	Dissertation	Core	-	-	-	200	-	200	8
Any one from the Discipline - Specific Electives									
LIS-PG-E401	Public Library Systems & Services (Discipline-Specific Elective - 4)	DSE	4	-	0	80	20	100	4
LIS-PG-E402	Academic Library Systems & Services (Discipline-Specific Elective - 5)	DSE	4	-	0	80	20	100	4
LIS-PG-E403	Special Library Systems & Services (Discipline-Specific Elective - 6)	DSE	4	-	0	80	20	100	4
								Total Credits	**20**

Detailed Course Content for Master of Library and Information Science
Department of Library and Information Science, Sikkim University

FIRST SEMESTER

Course Title	**Foundations of Library and Information Science**
Course Code	**LIS-PG-C101**
Core / Elective	**Core Course**
Course Credit	**4**
Course Objectives	The Objective of the Foundation of Library and Information Science course is to make the students:
	❖ Aware of the attributes of data, information and knowledge ❖ Aware of different types of libraries and their functions ❖ Aware of the concept of libraries and their role in the development of society ❖ Aware about the development of the library, legislation, and various acts governing library in India ❖ Aware about the role and functions of different organizations and professional associations of the library
Course Outcomes	After completion of the Foundation of Library and Information Science course, the student will be able to:
	❖ Know the concept of the libraries in relationship with society ❖ Learn the various legislation and acts governing libraries ❖ Assess the role of national and international library associations ❖ Highlight role of various library organizations and institutions at the national and international level
Unit	Description of Course
Unit I	Definition/attributes of Data, Information and Knowledge; Information Transfer Life Cycle: Generation, Storage and Dissemination; Concept, Definition, Purpose, Role, and Functions of Library. Historical development of libraries in India. Types of Libraries. Five Laws of Library Science. Philosophy of Librarianship: Nature, Scope, History, Role and Professional Ethics.
Unit II	Library Legislation and Acts: Need and Feature, Library Legislation in India; Model Public Library Act, The Press, and Registration of Books Act: Delivery of Books (Public Libraries Act) 1954 and Latest Amendments; Intellectual Property Rights; Copyright Act; RTI Act, Information Technology Act. Digital Millennium, committees, and commissions on libraries
Unit III	Information and Knowledge Society; Features of Information and Knowledge Society, Knowledge Economy. National Knowledge Commission of India, National Mission on Libraries, UNESCO Public Library Manifesto, IFLA Public Library Guidelines.
Unit IV	Library Associations and Information Centers: ILA, IASLIC, RRRLF, INFLIBNET, DESIDOC, DRTC, NASSDOC, NIScPR, National Library of India, NDLI, CILIP, Library of Congress, British Library, IFLA, ASLIB

Suggested Readings

1. Baker, D. (2011). *Libraries and Society*. Oxford: Chandos Publishing.
2. Bawden, D., and Robinson, L. (2013). *Introduction to information science*. Chicago: Neal Schuman.
3. Davies, D. L. (2013). *Library and Information Science*. New Delhi: Random Exports.
4. Feather, J. (2013). *Information Society: A study of continuity and change*. London: Facet Publishing.
5. Gilchrist, A. (2009). *Information Science in Transition.* London: Facet Publishing.
6. Goulding, A. (2017). *Public Libraries in the 21st Century: Defining Services and Debating the Future*. London: Routledge.
7. Isaac, K. A. (2004). *Library legislation in India: A critical and comparative study of state library Acts*. New Delhi: Ess Ess Publications.
8. Koontz, C. and Gubbin, B. (2010). *IFLA public library service guidelines* (2nd rev ed.). Berlin: Walter de Gruyter and Co.
9. Krishna Kumar and Jaipdeep Sharma (2009), Library and Information Science Education in India, Har Anand Publication
10. Mangla, P. B. (1981) (Ed). *Library and information science education in India*. New Delhi: Macmillan.
11. Ranganathan, S. R. (1957). *The five laws of library science*. Bombay: Asia Publishing House.
12. Rout, R. K. (1986). *Library legislation in India: Problems and prospects*. New Delhi: Reliance Publishing House.
13. Rubin, R. E. (2013). *Foundations of library and information science* (3rd ed.). New Delhi: DBS Imprints.
14. Smith, M. M. (1999). *Information ethics*. London: Bowker-Saur.
15. Tarango, J. (2017). *The role of information professionals in the knowledge economy*. Oxford: Chandos Publishing.

FIRST SEMESTER

Course Title	**Information Sources, Services and Literacy**
Course Code	**LIS-PG-C102**
Core / Elective	**Core Course**
Course Credit	**4**
Course Objectives	The Objective of the Information Sources, Services and Literacy course is
	❖ To provide in-depth knowledge about information sources, services and products ❖ To make students understand and explore different types of Information Sources and their evaluation ❖ To familiarize students with various information services, information repackaging and consolidation. ❖ To introduce the nature and purpose of reference and other services
Course Outcomes	Upon successful completion of the Information Sources, Services and Literacy Course, students will be able:
	❖ to efficiently understand the range of information sources used in the libraries ❖ to assess and evaluate the user's information needs ❖ to evaluate the purpose and role of the information sources to meet users' needs; ❖ to use information literacy skills and apply in providing information literacy in accordance to user's needs.
Unit	**Description of Course**
Unit I	Information Sources: nature, characteristics, format and types ; Primary, secondary, tertiary sources of information. Print and Electronic Sources (Documentary and Non-Documentary Sources); Finding Information from fact finding sources such as dictionaries, encyclopedias, year books, directories, gazetteers, biographical dictionaries (Who's who), Bibliographical Sources (INB, BNB, Trade bibliographies), Geographical Sources, Evaluation criteria of reference sources.
Unit II	Web Resources; Subject Gateways; e-books; e-journals; DOAJ and DOAR, Forum, Bulletin Board, Electronic & Web Publishing, Electronic Media; Searching information from web resources
Unit III	Information needs, and methods of user study. Types of users and their needs. Information Seeking Behavior (ISB); Theory and models. Reference Process; Reference Services: Concept; Purpose, Theories. Indexing and Abstracting Services; Document Delivery Services;
Unit IV	Information literacy: role, scope, methods, standards, models. E-learning: theories, principles, scale, standards, services and initiatives. GOI Digital Initiatives in Higher Education (SAWAYAM; NPTEL); Role of the library in promoting information literacy; Tools and Techniques used to deliver information literacy; Online Services (Library Apps, SMS alert, RSS Feed. Library networks.

Suggested Readings:

1. Ranganathan, S.R. (2006), Documentation: Genesis and Development, Ess Ess Publication
2. Bailin, K. (2018). *Planning academic library orientations. Case studies from around the world*. Cambridge: Chandos Publishing.
3. Benson, R. (2010). *Online learning and assessment in higher education*. Cambridge: Chandos Publishing.
4. Bopp, R. E. (2011). *Reference and information services: An introduction* (4th ed.). Santa Barbara, Calif.: Libraries Unlimited.
5. Cassell, K. A. (2012). *Reference and information services: An introduction* (3rd ed.). Chicago: Neal-Schuman.
6. Choudhury, G. G. (2001). *Information sources and searching on the World Wide Web*. London: Facet Publishing.
7. Crump, M. J. (2012). *Meeting the needs of student users in academic libraries*. Oxford: Chandos Publishing.
8. Elguindi, A. (2012). *Electronic resource management*. Oxford: Chandos Publishing.
9. Foskett, D.J. (1958). *Information services in libraries*. London: C. Lockwood.
10. Halaychik, C. S. (2018). *Licensing electronic resources in academic libraries*. Oxford: Chandos Publishing.
11. Katz, W. (2001). *Introduction to reference work* (8th ed.). Boston: McGraw-Hill Education.
12. Lokse, M. (2017). *Teaching information literacy in higher education*. Oxford: Chandos Publishing.
13. Mackey, T. P. (2015). *Metaliteracy: Reinventing information literacy to empower learners*. London: Facet Publishing.
14. McAvinia, C. (2016). *Online learning and its users*. Oxford: Chandos Publishing.
15. Ruthven, I. and Kelly, D. (2011). *Interactive information seeking behaviour and retrieval*. London: Facet Publishing.
16. Seetharama, S. (1997). *Information consolidation and repackaging framework, methodology, planning*. New Delhi: Ess Ess Publications.
17. Singh, G. (2013). *Information sources, services, and systems*. New Delhi: PHI Learning
18. Smith, L. C., and Wong, M. A. (2016). *Reference and information services: An introduction*. Santa Barbara, California: Libraries Unlimited.
19. Stachokas, G. (2019). *The role of the electronic resources librarian*. Oxford: Chandos Publishing.
20. Stebbins, L.F. (2006). *Student guide to research in the digital age: How to locate and evaluate information sources*. Westport, Conn.: Libraries Unlimited.
21. Walford, A. J. (1968-70). *Guide to reference materials* (3 vols.). London: Library Association.

FIRST SEMESTER

Course Title	**Information and Communication Technology Applications**
Course Code	**LIS-PG-C103**
Core / Elective	**Core Course**
Course Credit	**4**
Course Objectives	The objective of the Information and Communication Technology Applications is:
	❖ To understand the concept of information technology tools ❖ To understand the concept of Internet and its application ❖ To understand the concept of search engine and its evaluation ❖ To understand the use of IT in library applications
Course Outcomes	Upon successful completion of the Information and Communication Technology Application course, the students will be able:
	❖ to learn the concept of Information Technology Tools ❖ to know about various software tools commonly used in daily work ❖ to learn the Internet Technology commonly used in day to day library activities ❖ to demonstrate the techniques of search engine
Unit	**Description of Course**
Unit I	Information Technology Concepts; Computer Fundamentals; Different Components of Computers; Hardware, Software; System Software; Operating System (Windows, Linux); Privacy, Security, Proxies, Firewalls. LAN and Internet IP addresses, subnet masking, RFC-1918, DNS, Gateway, SSH, SFTP,
Unit II	System Software: Compilers, Interpretors, Overview of Programming Languages; Application Software: Word; Excel; PowerPoint; Open Source Software, github, sourceforge
Unit III	Fundamentals of Internet: Meaning, Purpose Function; Hypertext, HTML, XHTML, XML, XSLT, CSS, JSON. Database Management Systems: MySQL or PostgreSQL. Character Encoding: ASCII and UNICODE, Multimedia Files Formats.
Unit IV	Search Engines: Type and Architecture: Boolean Operators; Simple and Advanced Search features (Google as example); Clusty search engine, Advanced features of Browsers; Evaluation of Search Engine (Recall and Precision), Communication Technology: Introduction to Gsuit and Google Products (Email; Google Drive; Google Documents), Social Networking meaning & purpose. Advantage and Disadvantage

Suggested Readings:

1. Bharihoke, D. (2012). *Fundamentals of information technology* (4th ed.). New Delhi: Excel Books.
2. Phadke, D. N. (2017). *Library information technology*. Pune: Universal Publications.
3. Rajaraman, V. and Adabala, N. (2014). *Fundamentals of computers* (6th ed.). New Delhi: Prentice-Hall.
4. Tanenbaum, A. S. and Wetherall, D. J. (2013). *Computer networks* (5th ed.). New Delhi: Prentice Hall.
5. Rael Dornfest, Tara Calishain (2004), Google Hacks: Tips and Tools for Smarter Searching: O'Reilly Media
6. Stephan Spencer (2011), Google Power Search: The Essential Guide to Finding Anything Online with Google: O'Reilly Media
7. William Miller, Rita M. Pellen (2005), Libraries and Google, Routledge
8. Nicole Engard (2010), Practical Open Source Software for Libraries, Elsevier (Chandos)
9. Andrew Comeau (2017), MySQL Explained: Your Step By Step Guide to Database Design, CreateSpace Independent Publishing Platform; 2nd edition
10. Elizabeth Robson and Eric Freema (2012), Head First HTML and CSS 2e: A Learner's Guide to Creating Standards-Based Web Pages, O'Reilly; 2nd edition
11. Abraham Silberschatz, Henry F. Korth and S. Sudarshan (2021), Database System Concepts, McGraw Hill; 7th edition
12. Sethi (2006), Programming Languages: Concepts & Constructs, Pearson India; 2nd edition.

FIRST SEMESTER

Course Title	**Knowledge Organization and Arrangement: Library Classification (Theory)**
Course Code	**LIS-PG-C104**
Core / Elective	**Core Course**
Course Credit	**4**
Course Objectives	The objective of the Knowledge Organization and Arrangement: Library Classification (Theory) course is: ❖ To make students learn about the concept of library classification system ❖ To know the availability of various tools for library classification ❖ To understand the features of various classification schemes ❖ To Understand the facets of classification and notation system
Course Outcomes	Upon successful completion of the Knowledge Organization and Arrangement: Library Classification (Theory) course, students will be able to:
	❖ Know about library classification, aims and features. ❖ Understand the basic subject and their kinds. ❖ Understand the characteristics, merits and demerits of different library classification schemes. ❖ Elucidate various facets of classification system, able to classify knowledge resources and build call numbers
Unit	**Description of Course**
Unit I	Universe of Subject; Modes of formation of subjects and knowledge. Simple, Compound and Complex Subject; Knowledge and Subject Classification: Definition, Need, Purpose and Importance. Simple Knowledge Organization System (SKOS), Mapping and division of knowledge in various schemes of Library Classification with special reference to DDC, UDC and Colon Classification.
Unit II	Theoretical foundation of Library Classification by W C Berwick Sayers, H E Bliss, S R Ranganathan. ISKO: Historical Perspectives. General Principles and devices of classifying documents.
Unit III	Notation System, Call numbers, Class numbers, Book numbers, Faceted Classification, Postulational approach to classification, Principles of helpful sequence, Five Fundamental Categories and facet analysis and facet sequence. Shelf Arrangement, Shelf List, Arrangement of Special Collection
Unit IV	Online Classification Systems, Web Dewey, OCLC Classifier, Recent development and trends in classification research, Automated classification.

Suggested Readings:

1. Chan, L. M. and Salaba, A. (2015). *Cataloguing and classification: An introduction* (4th ed.). Lanham, MD: Rowman and Littlefield Publishers.
2. Dhyani, P. (2000). *Theory of library classification*. Delhi: Vishwa Prakashan.
3. Hunter, E. J. (2017). *Classification made simple: An introduction to knowledge organisation and information retrieval*. London: Routledge.
4. Kumar, K. (1993). *Theory of classification*. New Delhi: Vikas Publishing House.
5. Kumbhar, R. (2011). *Library classification trends in 21st century*. Oxford: Chandos Publishing.
6. Marcella, R., and Maltby, A. (2017). *The future of classification*. London: Routledge.
7. Ranganathan, S. R. (2006). *Prolegomena to library classification* (3rd ed.). New Delhi: Ess Ess Publications.
8. Rangathan, SR Colon Classification 6th edition
9. Rangathana, SR Elements of Library Classification
10. Ranganathan, S. R. (2006). *Philosophy of library classification*. Bangalore: Ess Ess Publications.
11. Satija, M. P. (2013). *The theory and practice of the Dewey Decimal classification system*. Philadelphia, PA: Chandos Publishing.
12. Satija, M. P. (2012). *Exercises in the 23rd edition of DDC*. New Delhi: Ess Ess Publications.
13. Sayers, W. C. (1958). *An introduction to library classification, theoretical, historical and practical: With readings, exercises and examination papers* (9th ed.). London: Grafton.

FIRST SEMESTER

Course Title	**Knowledge Organization and Arrangement: Library Classification (Practice)**
Course Code	**LIS-PG-C105P**
Core / Elective	**Core Course**
Course Credit	**4**
Course Objectives	While studying the Knowledge Organization and Arrangement: Library Classification (Practice) course, the students shall be able: ❖ To make student learn about the steps of the classification ❖ To understand the process of Notation System ❖ To make student learn about using various schemes for classifying documents
Course Outcomes	Upon successful completion of the Knowledge Organization and Arrangement: Library Classification (Practice) course, students will be able to:
	❖ Discuss the steps in practical classification and use of Index ❖ Construct class numbers for documents with simple, compound and complex subjects. ❖ Synthesize class numbers by using the standard subdivisions/common isolates/auxiliary tables.
Unit	**Description of Course**
Unit I	Classification of Documents of simple subjects by Colon Classification; Basic Subjects; Complex Subjects; Devices; Common Isolates; Space, Time, Language Isolated Use of Devices
Unit II	Classification of Documents of simple subjects by Universal Decimal Classification;
Unit III	Classification of documents of complex subjects by DDC latest edition available with the use of tables and devices.
Unit IV	Copy classification (Use of already worked out class number of books for Main Class, Division, Sections) Construction of Book Number and Call numbers

Suggested Readings:

1. Ranganathan, SR. *Colon Classification:* New Delhi: Ess Publication
2. Dewey, Melvil, Dewey Decimal Classification and Relative Index (2022 edition)
3. Universal Decimal Classification

SECOND SEMESTER

Course Title	**Library Management and Operations**
Course Code	**LIS-PG-C201**
Core / Elective	**Core Course**
Course Credit	**4 (Theory=60, Job and Tour Diary=20)**
Course Objectives	The Objective of the Library Management and Operations course is to make student:
	❖ To learn about the concept of library management ❖ To know about the process of the library management ❖ To learn about library resource management
Course Outcomes	After studying the course Library Management and Operations, the students shall be able to:
	❖ Understand the concept of management. ❖ Understand the routine library operations ❖ Learn the process of library resource management
Units	**Description of Course**
Unit I	Concept of Library Management - Principles and practices. Scientific management; MBO, SWOT Analysis. Personnel Management: Staffing Pattern and Nomenclature, Manpower Planning: Job Analysis, Job Description, Job Specification, Performance Evaluation, Leadership and Motivation
Unit II	Project Management: PERT/CPM. Quality management and certification. Risk management, Disaster management and Change management. Library Budget and Finance: Planning, Standards and Allocations. Library Building: Design, Planning and Furniture. Functional/Modular Library Building. Green Library Building.
Unit III	Resource Management: Principles and theories of collection development. Patron Driven Acquisition Module. Selection tools and techniques of print and e-resources. Finance, budgeting and accounting, Selection of book suppliers and their empanelment. Pricing policies and discount. Agreements with product suppliers and terms and conditions of supply. Licensing and pricing models of supply of online resources**.** Ordering, receiving and technical processing of books and other information products.
Unit IV	Maintenance: shelf reading and rectification. Stock verification, library statistics, annual report; User Management: Circulation Control: Registration, issue, return, online renewal, reservation; Furniture and equipment. Binding.

Suggested Readings:

1. Agee, J. (2007). *Acquisitions go global: An introduction to library collection management in the 21st Century*. Oxford: Chandos Publishing.
2. Bryson, Jo. (2018). *Effective library and information centre management* (2nd new ed.). London: Routledge.
3. Clayton, P. R. and Gorman, G.E. (2006). *Managing information resources in libraries: Collection management in theory and practice*. London: Facet Publishing.
4. Costello, L. (2016). *Evaluating demand-driven acquisitions*. Oxford: Chandos Publishing.
5. Drucker, P. (2012). *Management challenges for the 21st century*. London: Routledge.
6. Evans, G. E., and Saponaro, M. Z. (2012). *Collection management basics*. Santa Barbara, California: Libraries Unlimited (an imprint of ABC-CLIO).
7. Wilkinson, F. C. and Lewis, L. K. (2015). *The complete guide to acquisitions management*. Santa Barbara, California: Libraries Unlimited (an imprint of ABC-CLIO).
8. Gregory, V. L. (2011). *Collection development and management for 21st century library collections: An introduction*. New York: Neal-Schuman.
9. Holder, S. (2018). *Managing the multigenerational librarian workforce*. Oxford: Chandos Publishing.
10. Johnson, P. (2014). *Fundamentals of collection development and management*. Chicago: American Library Association.
11. Patra, N. (2017). *Digital disruption and electronic resource management in libraries*. Oxford: Chandos Publishing.
12. Matthews, J. (2005). *Strategic planning and management for library managers*. Santa Barbara, California: Libraries Unlimited.
13. Stueart, R. D. and Moran, B.B. (2007). *Library and information center management*. London: Libraries Unlimited.
14. Appleton, L. (2017). *Libraries and key performance indicators*. Oxford: Chandos Publishing.
15. Balagué, N. (2011). *Managing your library and its quality*. Oxford: Chandos Publishing.
16. Beard, W. I. and Holden, L. (1996). *Human resource management: A contemporary perspectives*. London: Longman.
17. Bryson, J. (1996). *Effective library and information management.* New Delhi: Jaico Publishing House.
18. Chatterjee, A. (2016). *Elements of information organization and dissemination*. Oxford: Chandos Publishing.
19. Dale, E. (1978). *Management: Theory and practice*. London: Mc Graw-Hill.
20. Hagar, C. (2012). *Crisis information management*. Oxford: Chandos Publishing.
21. Harvey, P. (1993). *Preservation in libraries: A reader*. London: R. R. Bowker.
22. Jenkins, C. and Morley, M. (1996). *Collection management in academic libraries*. Aldershot: Gowar.
23. Koontz, H. and Weihrich, H. (2015). *Essentials of management* (10th ed.). Chennai: McGraw Hill Inc.

24. Kumar, K. (2007). *Library management in electronics environment*. New Delhi: Har -Anand Publications.
25. Narayana, G. J. (1991). *Library and information management*. New Delhi: Prentice Hall of India.
26. Oliver, G. (2011). *Organisational culture for information managers*. Oxford: Chandos Publishing.
27. Sinha, S. C. (2004). *Library building and furniture: Design and planning*. New Delhi: Ess Ess Publication.

SECOND SEMESTER

Course Title	**Digital Library and Content Management System**
Course Code	**LIS-PG-C202**
Core / Elective	**Core Course**
Course Credit	**4 (40 Theory + 40 Practical)**
Course Objectives	While studying the Digital Library and Content Management System course, the students shall be able to:
	❖ Understand the Concept of Digital Library ❖ Understand the Methodology of Developing Digital Library ❖ Understand the Concept of Digital Content Creation ❖ Understand the Methods of Content Management
Course Outcomes	After studying the Digital Library and Content Management System course, the student shall be able to learn
	❖ Meaning of Digital Library ❖ Methods of Developing Digital Library ❖ Methods of Developing Digital Content ❖ Methods of Managing Digital Content
Units	**Description of Course**
Unit I	Concept of Digital Libraries; Historical Developments of Digital Libraries; Component and Elements of Digital Libraries (Digital Objects – Text, Image, Audio, Video); Networks; Digital Library Features
Unit II	Digital Library Developments, Architecture and Workflow: Open Archival Information System (OAIS) model, Archival Information Package (AIP), Submission Information Package (SIP), Dissemination Information Package (DIP); Digital Curation (DCC), Search Facilities: Lucene Search Engine; User interface. Digital Information Organization and Identifiers; Open Standards: OAI-PMH, OAI-ORE, REST, SWORD; Metadata Standards: Dublin Core, Qualified Dublin Core, ANSI/NISO etc.
Unit III	Collection Development and Preservation, Content Selection, Digitization, Techniques, Software, OCR, Institutional Repositories – Concepts and Application; Collection Development Policies; IPR – Copyright, DRM, Preservation Metadata: PREMIS; Handles CNRI, DOI, Registry of Digital Repository (Open DOAR); Digital Library Software: DSpace Greenstone, EPrints; Major Digital Library Initiatives (National and International);
Unit V	Digital Content Creation – Concept, Process and Methods; Content Management System:, Wordpress; Joomla; Drupal; Subject Plus; LMS: Introduction to Moodle

Suggested Readings:

Suggested Readings:

1. Chowdhury, G.G. (2003). *Introduction to digital libraries*. London: Facet Publishing.

2. Clobridge, A. (2010). *Building a digital repository program with limited resources*. Oxford: Chandos Publishing.
3. Carpenter, L., Shaw, S. and Prescott, A. (1998). *Towards the digital library: The British Library's initiative for access programme*. London: British Library.
4. Cohn, J. M., Kelsey, A. L. and Fiels, K. M. (1998). *Planning for library automation: A practical handbook*. London: Library Association.
5. Lovecy, I. (1984). *Automating library procedures: A survivor's handbook*. London: Library Association.
6. Pedley. P. (2001). *The invisible web: Searching the hidden parts of the internet*. London: Aslib.
7. Simons, N. (2013). *New content in digital repositories*. Oxford: Chandos Publishing.

SECOND SEMESTER

Course Title	**Library Automation and Networking**
Course Code	**LIS-PG-C203**
Core / Elective	**Core Course**
Course Credit	**4 (40 Theory + 40 Practicals)**
Course Objectives	While studying the Library Automation and Networking, the Objective is to make student: ❖ Understand the Concept of Library Automation ❖ Understand the Methodology of Library Automation ❖ Understand the Software for Library Automation ❖ Understand the Use of Automation in Various Sections of the library
Course Outcomes	After studying the Digital Library and Content Management System, the student shall be able to learn ❖ Meaning and Purpose of the Library Automation ❖ Process and Methods of Library Automation ❖ Know the selection process of various software for automation ❖ The Process of House Keeping Operation that can be automated
Units	**Description of Course**
Unit I	Introduction to Library Automation; Historical Perspective, Need and Purpose; Approaches to Library Automation
Unit II	Management of Library Automation: Planning; Library Automation Software; Choosing Library Automation Software; Evaluation of the Software; Implementation; Open Source Library Automation Software (KOHA); Propriety Software (SOUL)
Unit III	Automated Housekeeping Operations: Acquisition; Cataloguing; Circulation; Serial Control; Budget; Reports; Retrospective Conversion; Data Migration
Unit IV	Computerised Information Services and Networking: Computerized Alerting Services; Automated Cataloguing; SDI Automation; Z39.50; MARC; Network Software; Web Based Automation (Cloud based)

Suggested Readings:

1. Clayton, Marlene (2018). Managing library automation. 2nd ed. London: Routledge
2. Haravu LJ (2004) Library Automation: design, Principles and Practice Allied Pub. London
3. Lucy, A. T. 2005. An Introduction to Computer Based Library System, 3rd edition. New York: Wiley
4. Rao, I. K. R. 1996. Library Automation. New Delhi: New Age International.
5. Cooper, M. D. 1996. Design of Library Automation Systems: File Structures, Data Structures and Tools. New York: John Wiley & Sons.
6. Cohn, J. M., Kelsey, A. L. & Fiels, K. M. (1998). *Planning for library automation: A practical handbook*. London: Library Association.

SECOND SEMESTER

Course Title	**Knowledge Organization and Description: Library Cataloguing (Theory)**
Course Code	**LIS-PG-C204**
Core / Elective	**Core Course**
Course Credit	**4**
Course Objectives	While studying the Knowledge Organization and Description: Library Cataloguing (Theory) course, students shall be able to:
	❖ Understand the concept of Knowledge Organization ❖ Understand the Concept of Resource Description (Library Catalogue) ❖ Know the Different Tools available for Information and Resource Description ❖ Know the different standards for bibliographic exchange formats
Course Outcomes	After studying the Knowledge Organization and Description: Library Cataloguing (Theory) course, the students shall be able to:
	❖ Understand the concept of library catalogue and various inner and outer forms of library catalogue. ❖ Use the catalogue codes and standards ❖ Know about the main and added entries of library catalogue ❖ Understand various approaches of deriving subject headings using various tools
Unit	**Description of Course**
Unit I	Catalogue its types and functions, Document description according to AACR-2, Cataloguing of various types of information resources (printed, non-printed and electronic), Introduction to CCC.
Unit II	RDA, Standards for Machine Readable Bibliographic Records – ISO 2709/Z39.2/Z39.50 and the MARC family of Formats, XML, role of Law of Osmosis and Retro conversion, Standards for Bibliographic Organization, ISBDs, FRBR. Dublin core. ISSN, ISBN.
Unit III	Subject cataloguing and content analysis. Latest editions of Library of Congress Subject Headings List (LCSHL), Sears List of Subject Headings (SLSH), Chain Indexing, Thesaurus, Thesauro-facet.
Unit IV	Preparation of bibliographic records, Use of ISBN, ISSN, Copy cataloguing from Library of Congress, Columbia University Catalogue, British Library, OCLC and other national and international catalogues, Indexing and abstracting. Web OPAC and its functions, BIBFRAME, Centralized and Cooperative Cataloguing: OCLC, WorldCat, IndCat, NERCAT

Suggested Readings:

1. Westby, B. M. (1977). *Sears List of Subject Headings*. New York: HW Wilson.
2. Byrne, D. J. (1998). *MARC manual: Understanding and using MARC record*. Englewood: Libraries Unlimited.
3. Cole, T. and Han, M-J K. (2013). *XML for catalogers and metadata librarians*. Santa Barbara, California: Libraries Unlimited.
4. Fritz, D. A. (1998). *Cataloguing with AACR2 and US-MARC Records*. Chicago: ACA.
5. Hart, A. (2014). *RDA made simple: A practical guide of the new cataloguing rules*. Santa Barbara, California: Libraries Unlimited.
6. Joudrey, D. N. and Taylor, A. G. (2015). *Introduction to cataloguing and classification* (11th ed.). Santa Barbara, California: Libraries Unlimited.
7. Lubas, R. (2013). *The metadata manual: A practical workbook.* Oxford: Chandos Publishing.
8. Maxwell, R. and Maxwell, M. F. (1997). *Maxwell's handbook of AACR2R: Explaining and illustrating the Anglo American Cataloguing Rules and the 1993 amendments*. Chicago, IL: American Library Association.
9. Mering, M. (2014). *The RDA workbook: learning basics of resource description and access*. Santa Barbara, California: Libraries Unlimited.
10. Ranganathan, S. R. and Bhattacharyya, G. (1975). *Cataloguing practice* (2nd ed.). Bombay: Asia Publishing House.
11. Kumar, Krishna (2007) Cataloguing, Har Anand Publication

SECOND SEMESTER

Course Title	**Knowledge Organization and Description: Library Cataloguing (Practice)**
Course Code	**LIS-PG-C205P**
Core / Elective	**Core Course**
Course Credit	**4**
Course Objectives	While studying the Information Organization and Description: Library Cataloguing (Practice) course, the students shall be able to:
	❖ Understand the Cataloguing Process ❖ Understand the Concept of Various Entries ❖ Know the Elements of Cataloguing ❖ Prepare Catalogues using different rules of cataloguing
Course Outcomes	After studying Knowledge Organization and Description Course, the students shall be able to
	❖ Understand the concept of library catalogue. ❖ Use the catalogue codes and standards. ❖ Know about the main and added entries of library catalogue. ❖ Understand various approaches of deriving subject headings using various tools. ❖ Prepare catalogue entries for various types of information sources.
Unit	**Description of Course**
Unit I	Preparing Catalogue Entries as per AACR-2 (Main Entry; Added Entry With Various Authorship; Single Personal Authorship; Joint Authorship; Works of more than three Authors; Collaborative Works, Pseudonymous Authors,
Unit II	Corporate Authorship (Government, Organizations, Institutions, Societies); Series; Multivolume Works; Composite Works; Uniform Titles; Sacred Scripture ; Anonymous Works
Unit III	Preparing Catalogue Entries (Main, Added and Reference Entries) for Non-Book; Materials using Anglo American Cataloguing Rules -2 revised edition; Serials;
Unit IV	Non Book Materials : Cartographic Materials; Manuscript; Motion Pictures, Video Recording, Devices

Suggested Reading

1. **Anglo-**American library association. (1968). ALA Rules for filing catalog cards. Chicago: ALA.
2. Bakewell, K. G. B. (2014). A Manual of Cataloguing Practice: International Series of Monographs In library and Information Science (Vol. 14). Elsevier. catalogue code. 5th ed. Bombay: Asia.
3. Chambers, Sally (ed.) (2013). Catalogue 2.0: The future of library catalogue. London: Facet.

4. Cutter, Charles A. (1949). Rules for a Dictionary Catalogue. London: Library Grafton & Co.
5. Domanovszky, Á. (2017). Functions and objects of author and title cataloguing. DeGruyter.
6. Foskett, A. C. (1996). Subject Approach to Information. 5th ed. London: Library Association.
4. Girja Kumar, &Krishan Kumar. (1988). Theory of cataloguing. 5th ed. New Delhi: Vikas.
7. International Federation of Library Associations and Institutions.,& International Federation of Library Associations and Institutions. (2011). ISBD: International Standard Bibliographic Description. Berlin: De Gruyter Saur.
8. Joint Steering Committee for Revision of AACR, & American Library Association. (2005). Anglo American cataloguing rules. (2nd ed). (1988). Chicago: American Library Association.
9. Library of Congress. (2000). MARC 21 concise format for bibliographic data. Washington D.C.: Library of Congress, Network Development and MARC Standards Office.
10. Maxwell, Robert L. (2014). Maxwell's handbook for RDA: Explaining and illustrating RDA: resource description and access using MARC 21. London: Facet.
5. Miller, J. (2011). Sear's list of subject headings. 21st ed. New York: H.W. Wilson.
6. Oliver, C. (2010). Introducing RDA: a guide to the basics. American Library Association
7. Ranganathan, S. R. (1964). Classified Catalogue Code with additional rules for Dictionary
8. Ranganathan, S. R. (1974). Cataloguing practice. 2nd ed. Bombay: Asia.
11. Richard, Gartner (2016). Metadata: knowledge from antiquity to the semantic web. London: Springer.
12. Welsh, A., &Batley, S. (2012). Practical Cataloguing: AACR, RDA and MARC 21. Facet Publishing.

SECOND SEMESTER

Course Title	**Internship**
Course Code	**LIS-PG-NC206**
Core / Elective	**Internship**
Course Credit	**Non-Credit**
Course Objectives	The objective of the Internship is to train students with practical operation of the library
	❖ To know the daily activities of the library ❖ To know the how to handle daily activities
Course Outcomes	After going through a continuous internship, the students shall be able to
	❖ Apply their knowledge in handling day to day activities of the library.
Unit	**Description of Internship**
	❖ There will be continuous internship of the students. ❖ Morning session, student will attend the theoretical class and afternoon session they will practice in the library of the Sikkim University ❖ Faculty shall provide a detailed guidelines, standard operating procedures to the students about he various activities to be taken in internship ❖ The students will be provided a job diary and they have to prepare a report ❖ There might be presentations, discussion, charts, etc to adjudge the learning outcome of the internship ❖ Internship shall run all the semester ❖ Student will be given a Certificate at the End of Program ❖ The preferred place of internship shall be Central Library of Sikkim University

THIRD SEMESTER

Course Title	**Information Storage and Retrieval**
Course Code	**LIS-PG-C301**
Core / Elective	**Core Course**
Course Credit	**4**
Course Objectives	While studying the Information Storage and Retrieval course, the students shall be able to:
	❖ Understand the concept of Information retrieval ❖ Understand the concept of Indexing System ❖ Concept of the control mechanism in information retrieval ❖ Understand the various Information Retrieval Mechanism
Course Outcomes	After studying the Information Storage and Retrieval course, the student shall be able
	❖ To learn the concept of Information Storage and Retrieval system ❖ To learn the creation and management of Indexing process ❖ To understand various storage and retrieval techniques in day to day activities ❖ To apply web based information retrieval techniques for searching
Unit	**Description of Course**
Unit I	Information retrieval system: concept, definition and components. Content analysis and representation (ISBD; Metadata – MARC; Dublin Core), Contribution of Cutter, Kaiser, Ranganathan and E J Coates. Text retrieval models.
Unit II	Indexing and abstracting systems: Introduction to Subject Indexing Language. Pre-coordinate (PRECIS) and post-coordinate indexing (POPSI), KWIC, KWOC, KWAC
Unit III	Vocabulary control: Thesaurus and Thesaurofacet-Definition, purpose and construction; Information Retrieval Models and Queries; Evaluation of retrieval systems such as Precision, Recall, etc.
Unit IV	Information System and Databases; Searching and Retrieval: Search strategy and formulation, Truncation, Filtration, Boolean logic, Federated search, Web based retrieval, Free text search. Searching Databases such as Web of Science; SCOPUS, J-Gate; EBSCOHost; PubMed, AGRIS. Semantic Web, Ontology, Linked Data, Big Data, Data Mining, Natural Language Processing,

Suggested Readings:

1. Aitchison, J., Gilchrist, A. and Bawden, D. (2004). *Thesaurus construction and use: A practical manual* (4th ed.). London: Europa Publications.

2. Becker, J. and Robert, M. H. (1967). *Information storage and retrieval tools: Elements and theories*. New York: John Wiley.
3. Büttcher, S., Clarke, C. L., and Cormack, G. V. (2016). *Information retrieval: Implementing and evaluating search engines*. Cambridge, Massachusetts: MIT Press.
4. Chowdhury, G.G. (2010). *Introduction to modern retrieval system* (3rd ed.). London: Facet Publishing.
5. Cleveland, D. B and Cleveland, A. D. (2001). *Introduction to indexing and abstracting*. Colorado: Libraries Unlimited.
6. Convey, J. (1992). *Online information retrieval: An introductory manual to principles and practice* (4th ed.). London: Library Association.
7. Elis, D. (1996). *Progress and problems in information retrieval*. London: Library Association.
8. Foskett, A. C. (1996). *Subject approach to information.* (5th ed.). London: Library Association.
9. Fugmann, R. (1993). *Subject indexing and analysis theoretical foundations and practical advice*. Frankfurt: Index Verlag.
10. Grolier, E. D. (1962). *A Study of general categories applicable to classification and coding in documentation*. Paris: UNESCO.
11. Koltay, T. (2010). *Abstracts and abstracting*. Oxford: Chandos Publishing.
12. Korfhage, R. R. (1997). *Information storage and retrieval*. New York: John Wiley.
13. Kraft, D. H., Colvin, E., Bordogna, G., and Pasi, G. (2015). Fuzzy information retrieval systems: A historical perspective. In D. E. Tamir, N. D. Rishe and A. Kandel (Eds.), *Fifty Years of Fuzzy Logic and its Applications*. Springer.
14. Lancaster, F. W. (2003). *Indexing and abstracting in theory and practice* (3rd ed.). Urbana: University of Illinois.
15. Lancaster, F. W. (2003).*Vocabulary control for information retrieval* (2nd ed.). Arlington: Information Resource Press.
16. Losee, R. M. (1998). *Text retrieval and filtering: Analytical models of performance*. London: Kluwer.
17. Raieli, R. (2013). *Multimedia information retrieval*. Oxford: Chandos Publishing.
18. Soergel, D. (1974). *Indexing languages and thesauri: Construction and maintenance*. New York: John Wiley and Sons.
19. Soergel, D. (1985). *Organizing information: Principles of database and retrieval systems*. Orlando: Academic Press.

THIRD SEMESTER

Course Title	**Electronic Resource Management**
Course Code	**LIS-PG-C302**
Core / Elective	**Core Course**
Course Credit	**4**
Course Objectives	While studying the Electronic Resource Management course, the students shall be able to:
	❖ Understand the Concept of Electronic Resources and Its Management ❖ Know the Collection Development Policies and Procedure of Acquisition of Electronic Resources ❖ Know the licensing and negotiation system for electronic Resources ❖ Know the process of managing and providing access to electronic resources
Course Outcomes	After studying the Electronic Resource Management course, the student shall be able to learn
	❖ Concept of electronic resources ❖ Selection, Acquisition, and Processing of the electronic contents ❖ Effective Management of the Electronic Resources ❖ Assess the impact of electronic resources
Unit	**Description of Course**
Unit I	Overview of Electronic Resources: Introduction, Types of Electronic Resources, Emergence and Entrenchment of Electronic Resources in Libraries,
Unit II	Acquisition and Selection of Electronic Resources: Collection Development, Acquisitions of Electronic Resources, Technical services, and systems, Consortia Model of Electronic Resource Acquisition and Licensing, Vendor Selection, Negotiation and Contracting, Maintaining, and Renewing Electronic Resources; Deselecting Electronic Resources,
Unit III	Access Management: Linking, Parsing, and Access, Generating Title Lists, Linking and Discovery Tools, Delivering, Branding, Marketing, User Training, Digital Rights Management, Preservation of Electronic Resources – LOCKS, CLOCKS
Unit IV	Usage Control and Maintenance: Administrative Interfaces; Authentication; Proxy Servers, Remote Logins Electronic Resources Usage: COUNTER and SUSHI, Observation Logs, Copyright, Fair Use,

Suggested Readings:

1. Hawthorne, D. (2008). "History of Electronic Resources" in Electronic Resource Management in Libraries: Research and Practice H. Yu and S. Breivold (eds.). Information Science Reference: Hershey, NY, p. 1-15.

2. ARL Office of Leadership and Management Services. (2004). SPEC Kit 282: Managing Electronic Resources. Association of Research Libraries: Washington, DC. (Executive Summary)
3. Chen, Xiaotian, et.al. "E-Resource Cataloging Practices: A Survey of Academic Libraries and Consortia." The Serials Librarian 47, no. 1/2 (2004): 153–79.
4. Fowler, D. "Licensing: An Historical Perspective." Journal of Library Administration 42, no. 3/4 (2005): 177–97.

THIRD SEMESTER

Course Title	**Research Methodology and Scholarly Publishing**
Course Code	**LIS-PG-C303**
Core / Elective	**Core Course**
Course Credit	**4**
Course Objectives	The objective of the course Research Methodology and Scholarly Publishing is to make student:
	❖ learn about the research concept ❖ learn about the methods of research ❖ learn methods of data collection and analysis ❖ learn the process of scholarly publication
Course Outcomes	After studying the Research Methodology and Scholarly Publishing Course, the student shall be able to:
	❖ Know the concept of research ❖ Various steps of conducting research ❖ Use of tools for the purpose of collecting and analyzing data ❖ Purpose and process of Scholarly Publishing
Unit	**Description of Course**
Unit I	Basics of Research: Meanings, objectives, types and significance, Research Problem: Identification and Selection. Ethics in Conducting Research. Research Design: Basic principles of Research Design. Hypotheses Formulation, Types of Research Design and Sampling Techniques.
Unit II	Methods of Data Collection and Analysis: Questionnaire, Interview, Observation and Case Study. Data Representation: Tabulation, Analysis and Inferencing. Data Validation. Descriptive and inferential statistics, Measures of Central Tendency, Standard Deviation, T-test, Chi-square, ANOVA, Correlation and Regression Analysis. Statistical Software – SPSS; R Programming
Unit III	Elements of Academic Writing; Writing a Scientific Paper; Citation and Reference Management; Selection of Research Publishing Platforms; Research Impact Assessment and Metrics - Meaning and Purpose;
Unit IV	Publication Ethics & Misconduct. COPE and WAME. UGC Guidelines (2018); Plagiarism and Plagiarism Detection Software – URKUND (OURIGINAL), TURNITIN

Suggested Readings:

1. Andres, A. (2010). *Measuring academic research*. Oxford: Chandos Publishing.
2. Busha, C. H. and Harter, S. (1980). *Research methods in librarianship: Techniques and interpretation*. London: Academic Press.

3. Downs, R. B. and Down, E. (1966). *How to do library research*. Urbana: University of Illinois Press.
4. Goodman, V. D. (2011). *Qualitative research and the modern library*. Oxford: Chandos Publishing.
5. Kothari, C.R. (1990). *Research methodology*. New Delhi: Wishwa.
6. Kumar, K. (1992). *Research methods in library in social science*. New Delhi: Vikas.
7. Lawal, I. (2009). *Library and information science research in the 21st Century*. Oxford: Chandos Publishing.
8. Line, M. B. (1982). *Library surveys: An introduction to the use, planning procedure and presentation of survey* (2nd ed.). London: Clive Bingley.
9. Rao, I. K. R. (1988). *Quantitative methods in library and information science*. New Delhi: Wiley Eastern.
10. Showers, B. (2015). *Library analytics and metrices: Using data to drive decisions and services*. London: Facet Publishing.

THIRD SEMESTER

Course Title	**Research Data and Content Literacy**
Course Code	**LIS-PG-C304**
Core / Elective	**Core Course**
Course Credit	**4 (40 Theory + 40 Practical)**
Course Objectives	the objective of the course Research Data and Content Literacy is to make student: ❖ To learn about the data science ❖ To learn about the description of research data ❖ To learn the concept of research data management ❖ To learn the process of managing contents of research data
Course Outcomes	After studying the Research Data and Content Literacy course, the student shall be able to:
	❖ Know the concept of research data ❖ Know the methods of data description ❖ Learn the Concept of research data management ❖ Learn through hands-on practice of using research data management tools
Unit	**Description of Course**
Unit I	Introduction to Data Science and Big Data; Data Types, Data Models, Characteristics of Data; Sources of Data, Open Data, Five Star Data, Organizations involved dealing with Data related issues such as WDS, ICSU/CODATA, RDA etc.; FAIR Principles
Unit II	Metadata for Data, Domain Specific Metadata of Data; Ontologies related Data; Data Citation, Linked Open Data (LOD).
Unit III	Research Data Management, (RDM), Data Management Cycle; Data Management Plan (DMP), Government Data, RDM Steps; Data Curation and its workflow. Publishing Data, Data Repositories, Licenses related to Data; RDM Tools – Analyzing; Visualizing, Bibliographic
Unit IV	Research Data and Content Literacy – Steps of Data & Information Literacy (research data skills), Identify, Classify, Organize, Provide;' Models; data management competences; Practice: Bad Data, Software for Cleaning Messy Data – OpenRefine; Extract, Transform, Load (ETL) software – Talend; Software for Data Repositories: CKAN, dataVerse; Research Data Repository – Figshare, Zonedo

Suggested Readings:

1. Angermann, H. and Ramzan, N. (2019). *Taxonomy matching using background knowledge: Linked data, semantic web and heterogenous repositories*. [S.l.]: Springer.
2. Blokdyk, G. (2019). *Data curation: A complete guide* (2020 ed.). [S.l.]: 5Starcooks.

3. Gartner, R. (2016). *Metadata: Shaping knowledge from antiquity to the semantic web*. Switzerland: [S.l.]: Springer.
4. Gils, B. V. (2020). *Data management: A gentle introduction*. [S.l.]: Van Haren Publishing.
5. Han, J. and Kamber, M. (2011). *Data mining: Concepts and techniques* (3rd ed.). Waltham MA: Morgan Kaufmann.
6. Inmon, W. H. and Linstedt, D. (2019). *Data architecture: A primer for data scientist* (2nd ed.). London: Academic Press.
7. Kitchin, R. (2014). *The data revolution: Big data, open data, data infrastructures and their consequences*. Los Angeles: SAGE Pub. Ltd.
8. Kumar, U. D. (2017). *Business analytics: The science of data-driven decision making*. New Delhi: Wiley Pub.
9. Loukides, M. K. (2012). *What is data science*. Sebastopol, Calif.: O'Reilly Media.
10. Marco, D. (2000). *Building and managing the meta data repository: A full lifecycle guide*. New York: John Wiley and Sons.
11. Monino, J-L and Sedkaoui, S. (2016). *Big data, open data and data development*. London: ISTE Ltd.
12. Oliver, G. and Harvey, R. (2016). *Digital curation*. London: Facet Publishing.
13. Pomerantz, J. (2015). *Metadata*. Cambridge, Massachusetts: MIT Press.
14. Soo, K. (2017). *Numsense! Data science for layman: No math added*. Singapore: Annalyn Ng and Kenneth Soo.
15. Woz, R. J. (2017). *Data analytics for beginners: A beginner's guide to learn and master data analytics*. [S.l.]: Robert J. Woz.
16. Johnston, L. R., & Carlson, J. (2015). Data Information Literacy: Librarians, Data and the Education of a New Generation of Researchers (Purdue Information Literacy Handbooks). Purdue University Press.
17. Herzog, D. (2016). Data literacy: A user's guide. SAGE Publications.
18. Jones, B. (2020). Data Literacy Fundamentals: Understanding the Power & Value of Data (The Data Literacy Series). Data Literacy Press.

THIRD SEMESTER

Course Title	**Social Science & Humanities Information Systems and Services**
Course Code	**LIS-PG-E301**
Elective Course	**Discipline Specific Elective**
Course Credit	**4**
Course Objectives	While studying the Social Science & Humanities Information Systems and Services course, students shall be able to:
	❖ Understand the Nature of Humanities and Social Science discipline in General ❖ Understand the Information System and Services specific to humanities and social science discipline ❖ Understand the Various Information Resources in Humanities and Social Sciences Discipline ❖ Understand the Identification, Location and Retrieval of Information Sources in Humanities and Social Science Discipline
Course Outcomes	After completion of the Social Science & Humanities Information Systems and Services course, the student will be able to: ❖ Know the nature of the humanities and social science subject ❖ Able to Identify various services and information specific to humanities and social science discipline. ❖ Able to locate and retrieve various information resources related to humanities and social science discipline ❖ Able to identify the resource needs and provide resources to the users of humanities and social science discipline
Unit	**Description of Course**
Unit I	Patterns of Development of Knowledge : Humanities & Social Science; Developments in Major Subjects of Humanities and Social Science – Psychology, Philosophy, Geography, Law, Sociology, Political Science, History, Economics
Unit II	Sources of Information in Humanities and Social Sciences • Primary Sources of Information: Their Types, Characteristics & Role with Emphasis on Periodicals, Research Reports, etc. • Secondary Sources of Information: Their Types & Characteristics–Bibliographies, Indexes and Abstracts, Encyclopaedia, Year books etc. • Evaluation of Important Secondary Sources from the view of their Information Value • Databases in Social Sciences
Unit III	Information Centers and Organizations of Humanities and Sciences, Specific Roles of National and International Organizations

Unit IV	User Assessment, Resource Requirement and Information Retrieval. (i) Content Analysis; (ii) Condensation; (iii) Consolidation; (iv) Compilation; Information Seeking Behaviour of Different User Groups of Humanities and Social Science Discipline

Suggested Readings

1. Neelameghan A. and Prasad, K.N. Eds. Information Systems & Services in India. Bangalore Sarada Ranganathan, 2005.
2. Khanna, J.K. Documentation and information services, systems and techniques. Agra: Y.K. Publishers, 2000.
3. Khanna, J. K. Handbook of Information Systems and Services. New Delhi: Beacon Books, 1996.
4. Foskett, DN, Classification and indexing in the social sciences. Clive Bingley.
5. Webb, WH & others. Sources of information in the social sciences. CHICAGO: ALA, 1986
6. Langridge, D. Classification and indexing in the humanities. London: Butterworth, 1976.
7. Irani, Z. & Lover, P. (2008). Evaluating Information Systems: Public and Private Sector. London: Butterworth-Heneman.
8. Kelkar, S A. (2009). Information Systems: A Concise Study. New Delhi: PHI.

THIRD SEMESTER

Course Title	**Engineering & Medical Sciences Information Systems and Services**
Course Code	**LIS-PG-E302**
Elective Course	**Discipline Specific Elective**
Course Credit	**4**
Course Objectives	While studying the Engineering & Medical Sciences Information Systems and Services course, students shall be able to:
	❖ Understand the Nature of science, technology and medicine in General ❖ Understand the specific Information System and Services specific to science, technology and medicine discipline ❖ Understand the various information resources in science, technology and medicine discipline ❖ Understand the identification, location and retrieval of information sources in science, technology and medicine discipline
Course Outcomes	After completion of the Engineering & Medical Sciences Information Systems and Services course, the student will be able to:
	❖ Know the nature of the science, technology and medicine subjects ❖ Able to Identify various services and information specific to science, technology, engineering and medical sciences discipline. ❖ Able to locate and retrieve various information resources related to science, engineering, technology and medical sciences discipline ❖ Able to identify the resource needs and provide resources to the users of science, technology and medicine discipline
Unit	**Description of Course**
Unit I	Patterns of Development of Knowledge: Science, Technology, Engineering and Medical Science; Developments in Major Subjects of Engineering and Medical Science – Engineering, Computer Science, Information Technology, Medical Science, Nursing, Pharmacy; Agriculture)
Unit II	Sources of Information in Science, Engineering and Medical Science • Primary Sources of Information: Their Types, Characteristics & Role with Emphasis on Periodicals, Research Reports, Patents, Specifications etc. • Secondary Sources of Information: Their Types & Characteristics– Bibliographies, Indexes and Abstracts, Encyclopaedia, Year books etc. • Evaluation of Important Secondary Sources from the view of their Information Value
Unit III	Information Centers and Organizations of Science, Engineering and Medical Science and Their Role; Agricultural Information System; Databases (Engineering; Medical; Agriculture); Medical Information System

Unit IV	User Assessment, Resource Requirement and Information Retrieval. (i) Content Analysis; (ii) Condensation; (iii) Consolidation; (iv) Compilation; Information Seeking Behaviour of Different User Groups of Engineering and Medical Science Discipline

Suggested Readings

1. Parker, C. C. (2014). Information Sources in Science and Technology: A Practical Guide to Traditional and Online Use. Butterworth-Heinemann.
2. Niiranen, S., & Ribeiro, A. (2013). Information Processing and Biological Systems (Intelligent Systems Reference Library, 11) (2011th ed.). Springer.
3. Atlan, H. (1977). Sources of Information in Biological Systems. IFAC Proceedings Volumes, 10(12), 177–184. https://doi.org/10.1016/s1474-6670(17)66575-3
4. Charles Lord (2000). Guide to Information Sources in Engineering, Rain Tree Publishing
5. Roderick A. MacLeod et al (2004), Information Sources In Engineering (Guides to Information Sources) (Guide to Information Sources) 4th Edition: KG Saur
6. Information Sources in Science and Technology (Library Science Text Series)
7. Charlie D. Hurt (1998), Information Sources in Science and Technology: Libraries unlimited
8. Martha A. Tucker, (2004) Guide to Information Sources in Mathematics and Statistics: libraries unlimited.
9. Diane Schmidt, (2003), Guide to Reference and Information Sources in the Zoological Sciences (Reference Sources in Science and Technology) Libraries Unlimited
10. Stephen Adams (2020), Information Sources in Patents (Guides to Information Sources) 4th Edition, De Gruyter Saur

THIRD SEMESTER

Course Title	**Tribal Information, Archive, and Museum**
Course Code	**LIS-PG-E303**
Elective Course	**Discipline Specific Elective**
Course Credit	**4**
Course Objectives	While studying the Tribal Information, Archive and Museum course, students shall be able to:
	❖ Understand the Nature of Tribal Information. Archive and Museum as a Discipline ❖ Understand the Information System and Services specific to various tribal community in India ❖ Understand the Various Information Resources related to various tribes ❖ Understand the Identification, cataloguing and digitization of tribal information
Course Outcomes	After completion of the Tribal Information, Archive and Museum course, the student will be able to:
	❖ Know the nature of the tribal information ❖ Able to Identify various information specific to tribal communities in India ❖ Able to locate and retrieve various information resources related to tribes ❖ Able to manage information resources related to tribes
Unit	**Description of Course**
Unit I	Tribal Community in India; Community Needs: Assessment and Planning; Governmental and Non-Governmental Information Sources and Services for Tribes; Tribal Library and Management
Unit II	Tribal Information: Mission, Goal; Objectives Traditional Knowledge; Content Curation; Budgeting and Financial Management; Cultural Heritage: Concept, Purpose and Management, Govt Initiatives to Promote Tribal Information, Culture and Heritage
Unit III	Libraries and Tribal Community; Tribal Libraries and Information Centres in India; Digital Collection; Managing Audio Visual Collection; ICT Applications; Traditional Knowledge, Traditional Knowledge Management, Intellectual Property Rights in Traditional Knowledge
Unit IV	Archives and Museums: Meaning and Purpose; Process of Developing Archives; Archiving Policies and Procedures; Functions and contents of Tribal Archives Museums: Meaning and Purpose; Activities; Collections; Managing Museum Collection; Preservations; Cataloguing of Collection in Museums; User Services

	National Museum, Tribal Research Center Assam, Namgyal Institute of Tibetology, etc (Local and National Importance), Assam Institute of Research for Tribals and Scheduled Cast, Assam

Suggested Readings

1. Chandalia, H.S. (2017) Tribal Literature, Culture and Knowledge Systems,
2. Md. Jafar Imam, Introduction to Museology
3. Loriene Roy, Anjali Bhasin, Tribal Libraries, Archives, and Museums: Preserving Our Language, Memory, and Lifeways
4. Richard Harrison, Manual of Heritage Management (Conservation and Museology), 1994
5. Ali Hossaini, Manual of Digital Museum Planning, 2017
6. Keri E. Pearlson, Carol S. Saunders, et al. Managing and Using Information Systems: A Strategic Approach, Wiley, 2019
7. Maguni Charan Behera, (ed.) Tribal Studies in India: Perspectives of History, Archaeology and Culture, Springer
8. Nirmal Sengupta, Traditional Knowledge in Modern India: Preservation, Promotion, Ethical Access and Benefit Sharing Mechanisms, Springer
9. Amit Jha (2022), Traditional Knowledge System In India.
10. Teshager W. Dagne, Intellectual Property and Traditional Knowledge in the Global Economy: Translating Geographical Indications for Development, Routledge
11. Aditi Marwaha and Vishnu Goel, Handbook on Protection of Traditional Knowledge, 2021

FOURTH SEMESTER

Course Title	**Knowledge Management and Information Systems**
Course Code	**LIS-PG-C401**
Core / Elective	**Core Course**
Course Credit	**4**
Course Objectives	While studying the Knowledge Management and Information System course, the students shall be able to:
	❖ Understand the Concept of the Knowledge Management ❖ Understand the tools and techniques of Knowledge Management ❖ Know the concept of Information Systems ❖ Know about the important national and international Information System and practices
Course Outcomes	After studying this Knowledge Management and Information Systems course, the students shall be able to:
	❖ Articulate and exemplify basic knowledge about knowledge Management System ❖ Enunciating the concepts of KM Systems, Knowledge architecture etc ❖ Express effectively about Knowledge Management tools and portals ❖ Articulate basic knowledge about Knowledge capturing, codification, transferring and Sharing at national and international level
Unit	**Description of Course**
Unit I	Knowledge Management Concept and Scope – Definition, types, role, principles, tools, components and architecture. Types of Knowledge, KM Systems; Knowledge creation and knowledge architecture – Nonaka's model.
Unit II	Tools of Knowledge Management Information Management Vs Knowledge Management; Role of Librarian in Knowledge Management; Information System – Meaning and Purpose National and International Information Systems such as NIScPR, ENVIS, INIS, INSPEC, ERIC, Patent Information System, Biotechnology Information System (BIS), Agriculture Research Information System).
Unit III	System analysis and design. Data and information management systems. Information consortium: National Knowledge Resource Consortium (NKRC), ERMED, CeRA (Consortium on e-Resource in Agriculture), DeLCON, e-ShodhSindhu, N-List. Managing knowledge workers
Unit IV	Capturing tacit knowledge–methods; Knowledge codification– tools and procedures; Knowledge testing; Knowledge transfer. Knowledge Transfer and Sharing.

Suggested Readings:

1. Bikowitz, W. R. (2000). *Knowledge management*. Delhi: PHI Learning.
2. Bwalya, K. J. (2014). *Concepts and advances in information knowledge management*. Oxford: Chandos Publishing.
3. Chakrabarti, B. and Mahapatra, P. K. (2000). *Knowledge management in libraries*. New Delhi: Ess Ess Publications.
4. Evans, W. (2016). *Knowledge management in libraries*. Oxford: Chandos Publishing.
5. Quinn, J. B. (1992). *Intelligent enterprise: a knowledge and service based paradigm for industry*. New York: Free Press.
6. Becerra-Fernandez, I., & Sabherwal, R. Knowledge Management: Systems and Processes. Routledge,2014
7. Liebowitz,J.andWilcox,L.C. Knowledge management and its integrative elements. USA:CRC Press,1997.

FOURTH SEMESTER

Course Title	**Bibliometrics, Informetrics and Scientometrics**
Course Code	**LIS-PG-C402**
Core / Elective	**Core Course**
Course Credit	**4**
Course Objectives	While studying the Bibliometrics, Informetrics and Scientometrics course, the students shall be able to:
	❖ Understand the Concept of Metrics in Scholarly Communication ❖ Know the various laws associated with bibliometrics ❖ Know the concept of research metrics and application ❖ Use various tools to assess metrics in research
Course Outcomes	After studying this course Bibliometrics, Informetrics and Scientometrics, the students shall be able to:
	❖ Understand the basic knowledge of bibliometrics ❖ Familiarize with bibliometrics laws and its applications ❖ Familiarize with various metrics and its applications ❖ Articulate and exemplify the concepts relating to bibliometrics and their applications
Unit	**Description of Course**
Unit I	Introduction and need of metric studies in scholarly communication. Evolution of metric studies (From Librametrics to Knowledge geometry); Types of metrics eg: Bibliometrics, informetrics, Scientometrics, Webometrics, Altmetrics. Concept, need and types of scientific collaboration.
Unit II	Law of scattering (Bradford's law). Zipf's law, Lotka's law, Generalised bibliometrics distributions and Fitting of Informetrics models: Bradford's curve, Leimkuhler's distribution, etc.80-20 rules, Price's law relating to scientific productivity, Aspects of concentration measures; Circulation Statistics.
Unit III	Citation Analysis & Citation indexing. Journal level metrics (Impact Factor; SNIP; SJR); Impact Calculation - H and G Indexes calculation. Standard Citation Indicators (MOCR, FECR and MECR). Relative citation Indicators (NMCR and RCR); bibliographic coupling and co-citation analysis. Citation Databases: Scopus, Web of Knowledge, PubMed, Google Scholar. Author Level Metrics
Unit IV	Growth and obsolescence of literature: Various growth models; the half-life analogy, Determinations of aging factor and half-life: real vs apparent; synchronous vs diachronous. Mapping and Science Indicators, Mapping of science, Science indicators. Alternative Metrics; Author Profile (Google Scholar; SCOPUS ID; ORCID; Researcher ID; IRINS), Mapping Software (HistCite, Publish or Perish, VOS Viewer, Bibliometric Analysis using Bibliometrix of R Programming)

Suggested Readings:

1. Babbar, P., Jain, P.K., and Lamirel, J-C. (2017). *Trends in bibliometrics and scientometrics studies*. London: Athena Academic.
2. Ball, R. (2017). *An introduction to bibliometrics*. Oxford: Chandos Publishing.
3. Bellis, N. D. (2009). *Bibliometrics and citation analysis: from the science citation index to cybermetrics*. Lanham, Md.: Scarecrow Press.
4. Devaranjan, G. (1997). Bibliometric studies. New Delhi: Ess Ess Publications.
5. Egghe, L. and Rousseau, R. (1990). *Introduction to informetrics: Quantitative methods in library, documentation and information science*. Amsterdam: Elsevier Science.
6. Eom, S. B. (2008). *Author cocitation analysis: Quantitative methods for mapping intellectual structure of an academic discipline*. Hersey, PA: IGI Global.
7. Gingras, Y. (2016). *Bibliometrics and research evaluation: Uses and abuses*. Cambridge, Massachusetts: MIT Press.
8. Todeschini, R., and Baccini, A. (2016). *Handbook of bibliometric indicators: Quantitative tools for studying and evaluating research*. Weinheim: Wiley Pub.

FOURTH SEMESTER

Course Title	**Public Library Systems & Services**
Course Code	**LIS-PG-E401**
Core / Elective	**Discipline Specific Electives**
Course Credit	**4**
Course Objectives	To offer an understanding of the working of the public library system, the services it imparts, and the various aspects related to managing the public library system and services.
Course Outcomes	After studying Public Library Systems & Services course, students shall be able to:
	❖ Understand the concept, need, features; objectives, and functions of the Public Libraries System. ❖ Perceive the role of the Public Library in the promotion of formal and informal education and appropriate policies and legislation. ❖ Know the required professional competencies in administering, organizing, and managing public library collections in both print and digital media. ❖ Understand the requirement for resource sharing and offer extension and outreach services to a different category of users. ❖ Know the roles of Govt / Non-Govt bodies in promoting the Public Library System.
Unit	**Description of Course**
Unit I	Public Library: Concept, Need, features; objectives, and functions. Public Library Movement in India – Post-Independence Period; Role of Government and other agencies in the Development of Public Libraries: UNESCO, IFLA, Raja Rammohun Roy Library Foundation and National Mission on Libraries including National Knowledge Commission. National Policy for Library Development in India, Library Legislation
Unit II	Public Library: Organizational Structure; Administration; Financial Management. Human Resource Development & Management in Public Libraries. Staffing Pattern in Public Libraries. Evaluation of Public Library System.
Unit III	Collection Development: Nature, Types, and Policies. Factors of Collection Development. Problems in Collection Development and Collection Organization. Electronic Resource Selection and Acquisition; Collection for Special Categories of Users: Children, Young Adults, Senior Citizens, Differently Abled People, Public Library Services.
Unit IV	Services in Public Libraries; Resource Sharing in Public Libraries. Needs and Objectives of Resource Sharing. Integrated Public Library system. Case study of some of the prominent Public Libraries in India: National Library of India – Kolkata, The State Central Library - Mumbai, Kolkata & Sikkim, Connemara Public Library-Chennai; Delhi Public Library;

	Khudabaksh Oriental public Library - Patna. Extension Services (Author talk, book clubs etc), Out reach services (mobile libraries)

Suggested Readings:

1. Bhatt, R. K. (2011). Libraries in India: collection to connectivity. Ane Books.
2. Bhatt, R K. (2004). UNESCO: Development of libraries and documentation centres in developing countries. New Delhi: K. K. Publications.
3. Cassell, K.A. (2021). Public libraries and their communities: An introduction. Rowman & Littlefield.
4. Downey, J., & LaRue, J. (2017). Public library collections in the balance: Censorship, inclusivity, and truth. California: Libraries Unlimited.
5. Drucker, P. F. (2020). Management essentials. Harvard Business Press.
6. Goulding, A. (2016). Public libraries in the 21st century: defining services and debating the future. Routledge.
7. Gupta, A. (1994). Government of India Libraries: Their Growth, Development, and Services. B. R. Publishing Corporation.
8. Hage, Christine Lind. (2004). The public library start-up guide. Chicago: American Library Association.
9. Higgins, S E. (2007). Youth services and public libraries. Oxford: Chandos Publishing.
10. Jain, M. K., Mangla, P. B., Kalia, D. R., & Jagannathan, N. (1998). 50 Years: Library and Information Services in India. Shipra.
11. Murison, W. J. (1988). The public library: its origins, purpose and significance. Clive Bingley.
12. Patel, J. & Kumar, K. (2001). Libraries and librarianship in India. Westport: Greenwood Press.
13. Ranganathan, S. R., & Neelameghan, A. (1972). Public library system. Bangalore: Sarada Ranganathan Endowment for Library Science.
14. Sager, D. J. (1989). Managing the public library. Boston, Mass.: GK Hall.
15. Stephens, A. K. (1996). Assessing public library planning process: Information management, policy and services. Praeger Publishers Inc.
16. Shaffer, G. L. (2018). Creating the sustainable public library: The triple bottom line approach. ABC-CLIO.
17. Sharma, P. S. (1985). Public libraries in India. Ess Ess Publications.
18. Thomas, V K. (1997). Public libraries in India: Development and finance. New Delhi: Vikas Publication.
19. Totterdell, B. (1978). Public library purpose: A reader. C. Bingley; Hamden, Ct.: Linnet Books.
20. Weingand, D. E. (2013). Administration of the small public library. New Delhi: Indiana Publishing House.

FOURTH SEMESTER

Course Title	**Academic Library Systems & Services**
Course Code	**LIS-PG-E402**
Core / Elective	**Discipline Specific Electives**
Course Credit	**4**
Course Objectives	To offer an understanding of the working of the academic library system, the services it imparts, and the various aspects related to managing the academic library system and services.
Course Outcomes	After studying Academic Library Systems & Services course, students shall be able to:
	❖ Understand the purpose of academic library system. ❖ Know the administrative and routine functions of the academic libraries. ❖ Understand the requirement for resource sharing and offer extension and outreach services to a different category of users..
Unit	**Description of Course**
Unit I	Academic Libraries: Concept, Need, Features; Objectives, and Functions. Post-Independence Development of Academic Libraries in India. Role of UGC and other Bodies in Promoting Academic Libraries in India.
Unit II	Academic Library: Administration; Financial Management. Collection Development: Nature, Types (School, Higher Ed), and Policies. Factors of Collection Development. Problems in Collection Development and Collection Organization. Academic Library Services.
Unit III	Human Resource Development & Management in Academic Libraries. Staffing Pattern in Academic Libraries. Evaluation of Academic Library System. Role of Academic Library in Accreditation and Ranking; Library Building Planning and Standards
Unit IV	Resource Sharing in Academic Libraries. Needs and Objectives of Resource Sharing. Role of Library Networks and Consortia in promoting and strengthening Academic library system and services. Role of INFLIBNET Centre in Developing Academic Libraries (Specially in NE Region), Study of some of the prominent academic libraries in India: University Libraries (Central & State Universities).

Suggested Readings:

1. Ashworth, W. & Batten, W. E. (1975). Handbook of special librarianship and information work. London: Aslib.
2. Bhatt, R. K. (2011). Libraries in India: collection to connectivity. Ane Books.
3. Bhatt, R K. (2004). UNESCO: Development of libraries and documentation centres in developing countries. New Delhi: K. K. Publications.

4. Bhatt, R. K. Srivastava, G. G. & Sharma, S. K., Eds. (2021). Academic libraries. K. K. Publications.
5. Biddle, S. F. (1992). Planning in the university library: New directions in information management. Praeger Publishers.
6. Chigwada, J. P. (2021). Examining the impact of industry 4.0 on Academic libraries. Emerald Publishing Limited.
7. Connor, E. (2008). An introduction to instructional services in academic libraries. New York and London: Routledge.
8. Drucker, P. F. (2020). Management essentials. Harvard Business Press.
9. Frederick, D. E. (2016). Managing eBook metadata in academic libraries: Taming the tiger. Amsterdam: Chandos Publishing.
10. Higgins, S. E., & Derakhshan, M. (2017). Managing academic libraries: Principles and practice. Amsterdam: Chandos Publishing.
11. John, P. & Balasubramanian. (2021). Total quality management in Indian university libraries. MJP Publisher.
12. Jordan, P. (2017). The academic library and its users. Routledge.
13. Kumar, G. (1987). Library development in India. New Delhi: Vikas.
14. Kumar, G. & Kumar, K. (1983). Philosophy of user education. New Delhi: Vikas.
15. Mack, D. C., & Gibson, C. (2012). Interdisciplinarity and academic libraries. Chicago: Association of College and Research Libraries.
16. Munde, G., & Marks, K. (2009). Surviving the future: Academic libraries, quality, and assessment. Oxford: Chandos.
17. McKee, B. (1989). Planning library service. London: Clive Bingley.
18. Ranganathan, S.R. and Sundaram, C. (1940). Reference service and bibliography. Madras: Library Association.
19. Singh, S. (1986). Reference service in academic libraries in India. New Delhi: Ess Ess Publication.

FOURTH SEMESTER

Course Title	**Special Library Systems & Services**
Course Code	**LIS-PG-E403**
Core / Elective	**Discipline Specific Electives**
Course Credit	**4**
Course Objectives	To offer an understanding of the working of the special library system, its importance, and the various aspects related to managing the special library system and services.
Course Outcomes	After studying Special Library Systems & Services course, students shall be able to:
	❖ Understand the concept, need, features; objectives, and functions of special libraries. ❖ Know about the organizational and administrative aspects of special libraries. ❖ Understand the requirement for resource sharing and offer extension and outreach services to a different category of users.
Unit	**Description of Course**
Unit I	Special Libraries: Concept, Need, Features; Objectives, and Functions. Development of special libraries in India. Role of Special Libraries Associations in promoting and strengthening Special Library system and services
Unit II	Special Library: Administration; Financial Management. Collection Development: Nature, and Policies. Factors of Collection Development. Problems in Collection Development and Collection Organization. Special Library Services
Unit III	Human Resource Development & Management in Special Libraries. Staffing Pattern in Special Libraries. Evaluation of Special Library System
Unit IV	Resource Sharing in Special Libraries. Needs and Objectives of Resource Sharing. Research Sharing Networks: RLIN, OCLC, etc. Value of Information, Evidence-Based Librarianship. Study of some of the prominent special libraries in India: Legislative Libraries, Govt Libraries, Corporate Libraries, Library for Differently Abled Persons

Suggested Readings:

1. Burton, P. F. & Patic J. H. (1991). *Information management technology: A librarian's guide*. London: Chapman and Hall.
2. Clapp, V. W. (2010). *Features of the research library*. Urbana: University of Illinois.
3. Dhawan, K.S. (1997). *Multi-media library*. New Delhi: Commonwealth Publishers.
4. Drucker, P. F. (2020). *Management essentials*. Harvard Business Press.
5. Matarazzo, J. M., & Connolly, S. D. (2016). *Knowledge and special libraries*. London: Routledge.

6. Mount, E. (2019). *Creative planning of special library facilities*. United Kingdom: Taylor & Francis.
7. Mount, E. (2019). *Serving end-users in sci-tech libraries*. United Kingdom: Taylor & Francis.
8. Robertson, G. (2020). *Disaster planning for special libraries*. United Kingdom: Elsevier Science.
9. Scammell, A. (2008). *Handbook of special librarianship and information work*. London: Routledge.
10. Semertzaki, E. (2011). *Special libraries as knowledge management centres*. Oxford: Chandos Publishing.
11. Sinha, S. C. &. Dhiman, A. K. (2002). *Special libraries: Research & technical libraries*. New Delhi: Ess Ess Publication.
12. Yap, J. M., et al. (2016). *Special library administration, standardization and technological integration*. Hershey, PA: Information Science Reference.

Course Code: LIS-PG-C403

Dissertation

FOURTH SEMESTER

Course Title	**Dissertation**
Course Code	**LIS-PG-C403**
Core / Elective	**Core Course**
Course Credit	**8**
Objectives	To enhance research and writing skills of the student through step by step process
Course Outcomes	After writing the dissertation, the student shall be able to:
	❖ Understand the Process of Research ❖ Write his/her dissertations.
	Detailed Activities
	1. The Student has to take a topic in any area of library and information science 2. The Department will Assign Supervisor 3. Submit a synopsis in consultation with the supervisor at the start of the Third Semester 4. Present the synopsis in front of the Departmental Research Board 5. Work towards the data collection, analysis 6. Submit the dissertations as per the standard guidelines of the thesis and dissertation preparation
	Evaluation
	The evaluation of the dissertation shall be done by External Members, appointed by the Department
	Marking
	The Dissertation Caries 200 Marks (8 Credits) including a viva