SIKKIM UNIVERSITY

(A Central University Established by an Act of Parliament of India, 2007)

LEARNING OUTCOME - BASED CURRICULUM

MASTER OF LIBRARY AND

INFORMATION SCIENCE (M.LiB.I.Sc.)

(With effect from Academic Session 2023-24)

DEPARTMENT OF
LIBRARY AND INFORMATION SCIENCE
SIKKIM UNIVERISTY
6TH MILE, TADONG - 737102
GANGTOK, SIKKIM, INDIA

VICE-CHANCELLOR'S MESSAGE

Sikkim University stands at the forefront of embracing the transformative National Education Policy (NEP) 2020. In alignment with NEP 2020's vision and the guidelines of the Learning Outcomes-based Curriculum Framework (LOCF) mandated by the UGC, we have undertaken a comprehensive revision of our curriculum across all departments. This initiative ensures a holistic educational experience that transcends traditional knowledge delivery, emphasizing the practical application of knowledge in real-world scenarios.The shift towards LOCF marks a pivotal change from teacher-centric to learner-centric education, fostering a more active and participatory approach to learning. Our updated curriculum clearly defines Graduate Attributes, Programme Learning Outcomes (PLOs), and Course Learning Outcomes (CLOs), setting clear objectives for our students to achieve. This revision is designed to enable a teaching-learning environment that supports the attainment of these outcomes, with integrated assessment methods to monitor and encourage student progress comprehensively.

A key innovation in our curriculum is the mandatory integration of Massive Open Online Courses (MOOCs) through the SWAYAM platform, enhancing accessibility and the breadth of learning opportunities for students. Our approach encourages multidisciplinary studies through the curriculum while allowing for specialization. The curriculum embodies the policy's core principle of flexibility by enabling mobility for students, thereby allowing the exit and entry of students in the program.

I extend my heartfelt gratitude to our faculty, the Head of the Department, the Curriculum Development Committee members, the NEP coordinators, and the dedicated NEP Committee of Sikkim University for their relentless dedication to updating our curriculum. I appreciate Prof. Yodida Bhutia, the Chairperson, and all dedicated NEP Committee members for their thorough review and integration of LOCF and NEP components into our curriculum.

To our students, I convey my best wishes as we embark on this journey with our updated and inclusive curriculum, aiming not only to enrich their academic knowledge but also to nurture their personal growth, critical thinking, and ability to adapt and innovate in an ever-changing world.

Best wishes,

Prof. Avinash Khare
Vice Chancellor
Sikkim University

1. PREAMBLE

The two-year Post- Graduate Programme in Library and Information Science (M Lib I Sc) has been envisaged as a programme of professional study in the discipline of Library and Information Science. It aims at providing the learners a wider and more comprehensive understanding of various intricacies of Library and Information Science a Knowledge Domain. The library domain is changing very fast with the emergence of the new technology and with this change, there is a need to adopt new methods and pedagogy to comprehend the needs of resources in changing environment.

2. POST-GRADUATE ATTRIBUTES:

The learner of M.Lib.I.Sc. Programme should have the following attributes:

GA1: **Disciplinary Knowledge and Understanding:** Capable of demonstrating comprehensive knowledge and understanding of major concepts, principles, theories and laws of various subjects in Library and Information Science and other related fields of study, inter disciplinary and trans-disciplinary areas.

GA2: **Critical Thinking:** Capability to critically analyze subjects of documents to classify them properly and to derive subject headings for subject cataloguing, indexing purposes and ability to think critically for solving various problems pertaining to the management of Libraries and Information Centres. Further, abilities to judge for the use of ICT support for effective and efficient management of information sources, and services.

GA3: **Problem Solving:** Apply problem solving skills while providing support services for teaching, learning and research and for formulating appropriate strategies to use technologies, databases, platforms, resources. The problem solving skills may be tested through literature search, literature review, etc in major disciplines.

GA4: **Professional and Managerial Skills:** Ability to classify simple, compound and complex documents using standard classification schemes; capability to catalogue all types of documents using standard catalogue codes and metadata standards; ability to create database of records and search information from OPAC, Internet and electronic databases; ability to carry out housekeeping operations and to provide library and information services by using information and communication technologies and addressing managerial challenges.

GA5: **Communication and Research Skills:** Ability to communicate effectively in oral and written forms with users, colleagues and authorities in an effective manner. Further, ability to create information products such as announcements, information leaflets, bibliographies, e-publications. Capable of enhancing research skills in the domain and able to analyse research requirement from other subject areas.

GA6: **Digital Literacy, Capability and Competency Building:** Capable of using digital technology for communication, library housekeeping operations, and for searching information from OPAC, Internet, and online databases. Able to create media and information literacy using digital technology for better library services and resource utilization. Further, ability to work comfortably with the Learning Management System, Content Management System, and Digital Library Software; and explore possibilities of applying technologies associated with Artificial Intelligence, etc, for finding ways to improve services.

GA7: **Team Work and Leadership Quality**: Capable of working effectively and respectfully as an individual and as a leader in diverse teams in classrooms, in computer laboratories, in finding technological solutions, resource-based activities, and in Libraries and Information Centres.

GA8: **Multicultural Competencies:** Ability to demonstrate the knowledge, values, and beliefs of multiple cultures and effectively engage in a multicultural society by respecting diversity by providing services in democratic ways.

GA9: **Moral and Ethical Values:** Capable of demonstrating the ability to understand professional ethics and moral values based on the Indian ethos. Also well versed with the issue of Intellectual Property Rights, Copyright, Open Access, etc., while providing library services.

GA10: **Lifelong Learners:** Capable of self-paced and self-directed learning aimed at personal development, improving knowledge and skills, and reskilling through continuing educational opportunities. Further, capable of supporting individuals, institutions, and societal groups toward attaining lifelong learning objectives.

3.   **PROGRAMME LEARNING OUTCOMES (PLOS)**

On completing the Master of Library and Information Science Programme, students shall be able to realize the following outcomes:

PLO-1: Demonstrate knowledge of the information profession by relating foundational principles, philosophy, and ethics to contemporary issues, by identifying key, ongoing interdisciplinary developments in the field, and by analyzing current practices for future implications of the library and information science profession.

PLO-2: Demonstrate the latest practices of documents and information selection, acquisition, organization, storage, and dissemination.

PLO-3: Identify, use, evaluate, and manage the information sources, both print and electronic resources.

PLO-4: Identify, apply, and use of emerging and cutting-edge technologies in libraries and information centres.

PLO-5: Demonstrate the skills of patron-driven/user-driven services with high professionalism in providing the best library services to the right user at the right time of need by applying standard practices.

PLO-6: Advocating democratic value to library resources and services by applying tools and techniques addressing the needs of the users in an ethical way.

PLO-7: Demonstrate an understanding of Research Support Services to accelerate Research and Development (R&D) by analyzing and synthesizing the value of research literature.

PLO-8: Commit to continuous learning by participating in local, regional, and national professional development opportunities.

PLO-9: Use Indian and Traditional Knowledge and Principles to analyze and evaluate ideas and theories in modern disciplines.

PLO-10: Development Entrepreneurial Mindset by applying management tools, IT applications to pitch creative ideas and employability.

4. COURSE STRUCTURE OF TWO YEARS MASTER OF LIBRARY AND INFORMATION SCIENCE PROGRAMME (M. Lib. I. Sc.)

Master of Library and Information Science (M. Lib. I. Sc.) program is of four semesters and requires one to achieve **88** credits through the various Discipline Specific Core Courses (CORE), Open Courses (OC), Inter-Disciplinary Electives (IDE) / Multi-Disciplinary Electives (MDE), and Skill Enhancement Courses (SEC) / Value Added Courses (VAC) demonstrated as below:

Courses/Sem	Sem-1 (Credits)	Sem-2 (Credits)	Sem-3 (Credits)	Sem-4 (Credits)	Total
Discipline-Specific Core Courses	16	12	16	16	60
Open Courses OR Interdisciplinary / Multidisciplinary Elective Courses (IDC/MDE)	4	8	4	4	20
Skill Enhancement Courses (SEC)	2	-	2	2	06
Value Added Courses (VAC)	-	2	-		02
	22	22	22	22	88

5. ADMISSION/ENTRY /EXIT OPTIONS AND AWARD OF DEGREE

5a. Admission Criteria
The Admission to Master of Library and Information Science program shall be based on Central Admission Process adopted by the University. The Minimum Educational Criteria for Admission to the program shall be "A Three Year Bachelor's Degree in any Discipline with Minimum 50% Marks in aggregate or Equivalent Grade (45% for SC/ST/OBC/DA).

Award of Degree:
The student must earn 22 credits in each semester individually to be eligible for award of a degree. In case the student fails to earn 22 credits in any semester he/she has to reappear for the course (in which fails to score) in next available time. In other words, each student must score 40% marks in each paper or 50% in aggregate as per the norms of the university.

Upon successful completion of four semesters, the student shall be awarded "**Master of Library and Information Science**" (M. Lib. I. Sc.) Degree.

Duration of the Program:

The M. Lib. I. Sc. Program is a four semesters (Two Years) program. The maximum number of allotted semesters to complete and duly clear the course in order to be eligible to be awarded the degree shall be 6 (six).

(Note: University shall specify the duration of the programme as "Two Years Integrated Programme" or "Integrated Two Years Programme" in the Degree Certificate Awarded).

5b. Exit Options

If a student who successfully completes the first and second semesters and intends to exist just after completing two semesters, or even after the course of study during the subsequent semesters for any reason, shall be awarded **"Bachelor of Library and Information Science"** (B. Lib. I. Sc.) Degree. The student has to score minimum of 44 Credits (40% marks in each course individually and 50% in aggregate in each semester) to be eligible for award of a bachelor degree.

5c. Lateral Entry Admission (in Third Semester)

If any students possessing One Year Bachelor Degree in Library and Information Science (B. Lib. I. Sc./B. Lib. Sc.) and wish to join Sikkim University Master of Library and Information Science Programme may be given lateral entry admission in the Third Semester.

Minimum Qualification for Lateral Entry Admission: The applicant must have secured at least 50% (45% for SC/ST/OBC category) in their Bachelor of Library and Information Science Program from any UGC recognised university/institute from India.

Name of the Degree: The Degree Awarded shall be One Year **"Master of Library and Information Science"** (M. Lib. I. Sc.) for student admitted through lateral entry.

Number of Seats: As per current norms, the number of seats available is ten. Any vacant seat, out of ten, due to the non-joining of any student during the regular semester shall be filled by lateral admission. The University shall decide on admission process.

6.   LIBRARY VISITS AS A EDUCATIONAL TOUR

As a part of the course - Library Management and Operations (LIS-PG-C201), the student shall be taken on an Educational Tour. This will help students gain an exposure to the Institutions of Higher Learning Libraries / (different types of Libraries/Archives/ Museums of National Importance) and make them learn about the latest practices/ trends. The students shall follow the university guidelines issued from time to time and submit a tour report. The report shall carry One Credit. The department shall provide the guidelines for the tour report. The place of visits shall be relevant to curriculum of the program. **University shall sponsor the educational tours as per the approved guidelines.**

7.   MOOCs THROUGH SWAYAM

Students may earn up to 40 percent of the total credit of the programme from SWAYAM (Study Webs of Active-Learning for Young Aspiring Minds) or any other Platform. The selection of the course(s) from SWAYAM is subject to the availability and the 75 percent

content similarity with the existing courses in the department. The credits and the grade earned by the students in the particular course will be transferred and added in their mark statement.

The Department shall announce the availability of MOOCs. Students may opt the SWAYAM course(s) by prior intimation to the department. The Swayam Mentor will provide the details of the courses available through MOOCs. Students should give a declaration that in case s/he fails in the proctored examination conducted by SWAYAM s/he may be allowed to pursue the same course from the department as a reappear.

8. EXPERIENTIAL LEARNING

The LIS-PG-EL308 (Experiential Learning) shall be a continuous hands on practice comprising of activities from previous semesters. The student shall have an opportunity to learn their own pace throughout the three semesters while experiencing various activities in Central Library. The experiential learning activities and modality shall be decided by the course/teacher concern during the semester and maintain a record of all the activities undertaken during the experiential learning by providing **Standard Operating Procedures** (SOPs) and attendance. Head of the Department shall monitor the activities and record of continuous learning of the students. The Experiential Learning shall be credited with Two Credits at the end of the Fourth Semester.

University / Department may also help student to grab internship opportunity at other libraries after completion of the program.

9. ATTENDANCE

As per the norms of the University, every student shall have to attend at least 75% of the classes during the semester for appearing the final semester exam conducted by the university.

10. OUTREACH PROGRAMS, LECTURES, CONFERENCES

To expose and provide wider knowledge about the library and information science development trends, the department shall also organize local library tour; invited lectures/guest lectures, demonstration of software, products and services; posters presentation, quizzes, etc from time to time. The student shall also motivate to attend national international conferences, workshops, seminar which add value to their knowledge as per the needs arises.

11. LEARNING OUTCOMES INDEX

Core Courses

Core Courses	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14
Disciplinary Knowledge and Understanding	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Critical Thinking	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Problem solver		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Professional and Managerial Skills		Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y
Communication Skills							Y				Y	Y	Y	Y
Digital Literacy and Capability		Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y
Team Work and Leadership Quality	Y					Y	Y		Y	Y		Y		
Multicultural Competencies	Y				Y			Y						
Moral and Ethical Values	Y					Y			Y		Y	Y		Y
Lifelong Learners	Y	Y			Y	Y			Y	Y		Y	Y	Y

Elective Courses

Elective Courses	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13
Disciplinary Knowledge and Understanding		Y	Y	Y	Y	Y		Y	Y	Y		Y	Y
Critical Thinking		Y		Y		Y	Y		Y	Y	Y	Y	Y
Problem solver		Y		Y		Y	Y	Y	Y	Y	Y	Y	Y
Professional and Managerial Skills	Y			Y	Y	Y			Y	Y		Y	Y
Communication Skills	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Digital Literacy and Capability	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Team Work and Leadership Quality	Y	Y		Y	Y	Y							Y
Multicultural Competencies	Y		Y		Y								Y
Moral and Ethical Values		Y		Y	Y					Y	Y	Y	Y
Lifelong Learners	Y	Y					Y		Y			Y	Y

Course Structure of Two Years Master Degree Programme in Library and Information Science

Sikkim University

FIRST SEMESTER

Course Code	Course Name	Course Type	L	T	P	Summative Assessment	Formative Assessment	Total Marks	Credits
LIS-C-501	Foundations of Library and Information Science	Core	3	1	0	50	50	100	4
LIS-C-502	Information Sources and Services	Core	3	1	0	50	50	100	4
LIS-C-503	Information and Communication Technology Application (Theory & Practice)	Core	2	-	2	40(T) 40(P)	20	100	4
LIS-C-504	Knowledge Organization and Arrangement: Library Classification (Theory & Practice)	Core	2	-	2	40(T) 40(P)	20	100	4
LIS-O-505*	Communication and Soft Skills	SEC	3	1	0	50	50	100	4
	Value Added Course (VAC)								
LIS-V-506	Indian Traditional Knowledge System	VAC	2	-	0	25	25	50	2
							Total Marks	600	
								Total Credits	22

*The students may opt through MOOCs (IGNOU) / Department. Decided by the department at the start of the semester

1 Credid – 15 Hours

SECOND SEMESTER

Course Code	Course Name	Course Type	L	T	P	Summative Assessment	Formative Assessment	Total Marks	Credits
LIS-C-551	Library Management and Operations	Core	3	1	0	50 (T)	30+20 (TD)	100	4
LIS-C-552	Library Automation and Networking (Theory & Practice)	Core	2	-	2	40(T) 40(P)	10+10 (Viva)	100	4
LIS-C-553	Knowledge Organization and Description: Library Cataloguing (Theory & Practice)	Core	2	-	2	40(T) 40(P)	10+10 (Viva)	100	4
Any Two from the Inter-Disciplinary/Multidisciplinary Electives									
LIS-E-554[#]	**Marketing** of Library and Information Services	IDE	3	1	-	50	50	100	4
LIS-E-555	Tribal Information, Archive, and Museum[#]	IDE	3	1	-	50	50	100	4
LIS-E-556[#]	Information, Media and Data Literacy	IDE	3	1	-	50	20	100	4
	Value Added Course (VAC)								
LIS-V-557[$]	Cyber Security	VAC	2		0	25	25	50	2
							Total Credits		22

[#]IDE Shall be announced by the department at the start of the semester based on demand and faculty availability.

[$]Through MOOCs / Department / Inter-Departmental Arrangement

1 Credit = 15 Hours

THIRD SEMESTER

Course Code	Description	Course Type	L	T	P	Summative Assessment	Formative Assessment	Total Marks	Credits
LIS-C-601	Research Methodology in Library and Information Science	Core	3	1	0	50	50	100	4
LIS-C-602	Digital Library Development (Theory & Practice)	Core	2	-	2	40(T) 40(P)	10+10 (Viva)	100	4
LIS-C-603	Information Storage and Retrieval	Core	3	1	-	50	50	100	4
LIS-C-604	Database and Content Organisation System (Theory & Practice)	Core	2		2	40(T); 40(P)	10+10 (Viva)	100	4
Skill Enhancement Course (SEC)									
LIS-S-605	Bibliometrics, Informetrics, and Scientometrics	SEC	2	-		25	25	50	2
Any One from the Inter-Disciplinary/Multidisciplinary Electives									
LIS-E-606	Open Access and Scholarly Publishing	IDE	3	1	0	50	50	100	4
LIS-O-607@	Preservation and Conservation of Library Materials	OC	3	1	0	50	50	100	4
								Total Credits	**22**

@ Through MOOCs / Department. Decided by the department at the start of the semester

1 Credit = 15 Hours

FOURTH SEMESTER

Course No	Description	Course Type	L	T	P	Summative Assessment	Formative Assessment	Total Marks	Credits
LIS-C-651	Knowledge Management and Information Systems	Core	3	1	0	50	50	100	4
LIS-C-652	Electronic Resource Management	Core	3	1	0	50	50	100	4
LIS-R-653	Dissertation	Core	8	-	-	150	50 (25 IA+25VIVA)	200	8
Skill Enhancement Courses (SEC)									
LIS-P-654	Experiential Learning	SEC	0	-	2	25	25	50	2
Any one from the Inter-Disciplinary/ Multidisciplinary Electives									
LIS-O-655%	Intellectual Property Rights	OC	3	1	-	50	50	100	4
LIS-E-656	Library Entrepreneurship	DE	3	1	0	50	50	100	4
LIS-E-657	Research Data Management	IDE	3	1	0	50	50	100	4
							Total Credits		22

%Through MOOCs/Department. Decided by the department at the start of the semester

1 Credit = 15 Hours

C-Core Courses; **E**-Elective Courses; **O**-Open Courses; **V**-Value Added Courses; **R**: Research

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

FIRST SEMESTER

Course Code	LIS-C-501
Course Title	Foundations of Library and Information Science
Semester	First
Course Level	500
Total Marks	100
Course Credit	4 (L+T+P=3+1+0=4) Lecture: 45 Hrs+Tutorial:15 Hrs+ Practical: 0 Hrs
Course Learning Outcomes	After completion of the Foundation of Library and Information Science course, the student will be able to:
	CLO1: Comprehend the concept of information and the discipline of Library and Information Science CLO2: Integrate the laws of Library Science into Librarianship as a profession CLO3: Examine the provisions of various library legislation and acts in the Indian and International context CLO4: Describe the roles of the knowledge society and associations in India and international level CLO5: Assess the role of libraries in meeting Sustainable Development Goals (SDGs)
Unit	Description of Course
Unit I Data, Information & Knowledge	Definition/attributes of data, information, knowledge and wisdom; Information Cycle: generation, storage, and dissemination; Concept, definition, purpose, role, and functions of libraries. Historical development of libraries in India. Types of libraries (Academic, Public, and Special: objectives, features, and functions). Five Laws of Library Science. Philosophy of librarianship; Library profession.
Unit II Library Legislation & Acts	Library Legislation and Acts: Need and purpose, 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; UNESCO Public Library Manifesto, IFLA Public Library Guidelines. Digital Millennium Act; RTI Act, Information Technology Act. **Library Cess v/s Library Tax**
Unit III Information & Knowledge Society	Information and Knowledge Society; Features of Information and Knowledge Society, Knowledge Economy. Committees and commissions on libraries in India; National Knowledge Commission of India, National Mission on Libraries, Sustainable Development Goals (SDGs) and Libraries.
Unit IV	Library Associations and Information Centres: ILA, IASLIC, RRRLF, INFLIBNET, DESIDOC, NIScPR, National Library of India, ALA, CILIP, NDLI, Library of Congress, British Library, IFLA, OCLC.

Library and Information Centres	

SUGGESTED TEACHING LEARNING STRATEGIES

❖ Lecture-cum discussion & tutorials, library readings, critical discussion, reflective writing comparative analysis
❖ Literature reviews, discussion, case studies
❖ Guided readings and discussions institution's role in promoting library services
❖ Individual and group presentations by students on selected themes
❖ Visit to local libraries and information centres

Assessment Framework

Assessment	Written Mode	Oral Mode	Blended Mode
Formative Assessment (50 Marks)	Class Test, Open Book Test, Online Test, Article Writing, Objective Test, Class Assignment, Home Assignment, Annotated Bibliographies, Reports, Book Review	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Role Playing, Quiz, Think-Pair-Share, Seminar	Presentations, Seminars, Field Assignments, Poster Presentations, Portfolios
Summative Assessment (50 Marks)	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

Note: Teachers can choose any mode of formative assessment based on CLOs

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. Goulding, A. (2017). *Public Libraries in the 21st Century: Defining Services and Debating the Future*. London: Routledge.
6. Isaac, K. A. (2004). *Library legislation in India: A critical and comparative study of state library Acts*. New Delhi: Ess Ess Publications.
7. Koontz, C. and Gubbin, B. (2010). *IFLA public library service guidelines* (2nd rev ed.). Berlin: Walter de Gruyter and Co.
8. Krishna Kumar and Jaideep Sharma (2009), Library and Information Science Education in India, Har Anand Publication
9. Mangla, P. B. (1981) (Ed). *Library and information science education in India*. New Delhi: Macmillan.
10. Ranganathan, S. R. (1957). *The five laws of library science*. Bombay: Asia Publishing House.
11. Rout, R. K. (1986). *Library legislation in India: Problems and prospects*. New Delhi: Reliance Publishing House.

12. Rubin, R. E. (2013). *Foundations of library and information science* (3rd ed.). New Delhi: DBS Imprints.
13. Smith, M. M. (1999). *Information ethics* . London: Bowker-Saur.
14. Tarango, J. (2017). *The role of information professionals in the knowledge economy* . Oxford: Chandos Publishing.
15. How libraries contribute to sustainable development & the SDGs https://www.ifla.org/wp-content/uploads/2019/05/assets/alp/103-fbradley-alp.pdf
16. Gani, Esther; Kasa, M. Gabriel; & Khali, Allahmagani (2016). Roles of library in supporting sustainable development goals. National Space Research and Development Agency: 3rd Conference of Certified Librarians in Nigeria 8th November, 2016.

FIRST SEMESTER

Course Code	LIS-C-502
Course Title	Information Sources and Services
Semester	First
Course Level	500
Total Marks	100
Course Credit	4 (L+T+P=3+1+0=4) Lecture: 45 Hrs+Tutorial:15 Hrs+ Practical: 0 Hrs
Course Learning Outcomes	After completion of the Information Sources and Services course, the student will be able to:
	CLO1: Identify and explain the different types of information sources CLO2: Evaluate efficiently the range of information sources used in the libraries CLO3: Collect and facilitate access to the different electronic resources for users of the library CLO4: Assess, evaluate, and disseminate the information as per user's need CLO5: Impart information literacy to subject-specific Information Sources and Services
Unit	Description of Course
Unit I Information Sources	Information Sources: Nature, characteristics, format and types; Primary, secondary, tertiary sources of information. Print and electronic sources; Documentary and non-documentary sources; Fact finding sources - Dictionaries, Encyclopaedias, year books, directories, gazetteers, biographical dictionaries (Who's Who), bibliographical sources (National / Subject /Trade); Geographical sources; Wikipedia; Evaluation criteria of reference sources.
Unit II Electronic Resources	Subject Gateways; e-books; e-journals; DOAJ and DOAR, forum, bulletin board, electronic & web publishing; Searching information from web.
Unit III Reference & Information Needs	Information needs and methods of user study. Types of users and their needs. Information Seeking Behaviour; Theory and models; Reference process; Reference Services: Concept; purpose, theories; FAQs, Chats Service; Q&A; Indexing and Abstracting Services; Resource Sharing
Unit IV Information Sources and Services	Information Sources and Services in subject-specific disciplines; Sciences, Social Sciences and Humanities, Medical Sciences, Engineering & Technology, Biological Science: Objectives, scope, and specific resource (Web of Science, SCOPUS, PubMed, Indian Citation Index, any other important sources, SSRN).

SUGGESTED TEACHING LEARNING STRATEGIES

❖ Lecture-cum discussion, library readings, critical discussion
❖ As a case study, the student shall identify and evaluate different types of reference & information sources available in the library
❖ Demonstration of online information sources (such as databases, indexes, subject gateways, catalogues, etc.)
❖ Individual and group presentations by students on selected themes
❖ User studies assignment (survey, interviews, etc.)

ASSESSMENT FRAMEWORK

Assessment	Written Mode	Oral Mode	Blended Mode
Formative Assessment (50 Marks)	Class Tests, Online Tests, Article Writing, Objective Tests, Class Assignment, Home Assignments, Annotated Bibliographies, Reports, Book Review, Article Reviews, Journal Writing, Reference Source Evaluation Assignments	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Role Playing, Quiz, Think-Pair-Share, Seminar, Interviewing	Presentations, Seminars, Field Assignments, Poster Presentations, Portfolios, Surveys
Summative Assessment (50 Marks)	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

Note: Teachers can choose any mode of formative assessment based on CLOs

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 Code	LIS-C-503	
Course Title	**Information and Communication Technology Applications** (Theory & Practice)	
Semester	First	
Course Level	500	
Total Marks	100	
Course Credit	**4 (L+T+P=2+0+2=4)** **Lecture: 20 Hrs+Tutorial:0 Hrs+ Practical: 40 Hrs**	
Course Learning Outcomes	Upon successful completion of the Information and Communication Technology Application course, the students will be able:	
	CLO1: Acquire the basic concept of the computer and its functions CLO2: Comprehend various components of computer and its application CLO3: Determine and apply various software tools commonly used in daily work CLO4: Practice Internet Technology (IT) commonly used in day-to-day library activities CLO5: Demonstrate the techniques of search engine and analyse security issues in day-to-day work	
Unit	**Description of Course**	**Practical**
Unit I Computer Fundamentals	Introduction to computer; Generation of computers; Basic components/ units; Types of computers: desktop, laptop, server, workstation; Hardware, software, memory & storage devices; System and Application Software.	Demo of computers and referrals; hardware; software etc
Unit II	Operating System: MS-DOS, Linux and Windows; File format &	Demonstrations

Operating System & Databases	management (both command and UI mode); Introduction to DBMS, RDBMS, SQL, data storage and retrieval, open-source RDBMS.	
Unit III **Networking and Web Services**	Introduction to data communication; Computer networks; Components of networking; Type of networks; Ubiquitous Networks (Wi-Fi, RFID, Bluetooth); Internet; WWW; Email; IP-Address; Domain name; Browsers, Internet Protocols and Standards (HTTP, HTTPS, TCP/IP etc.); Servers: Web-Server, Proxy-Server, Mail Server; Cloud storage for library applications.	Demonstrations and understandings about it
Unit IV	Online Utility Software: Search engines, video conferencing, file sharing; Use of open google tools; Basic concepts of AI; Smart software and systems; Cyber security and privacy, threats, vulnerabilities, and countermeasures; Security risks; Safe browsing: Strong passwords, Software updates; Malware, Phishing, Hacking and Identity theft. Firewall.	Demonstrations

SUGGESTED TEACHING LEARNING STRATEGIES

- ❖ Lecture-cum discussion, library readings, critical discussion, & applications
- ❖ Physical demonstrations (types of hardware, etc.)
- ❖ Practical demonstrations (different software, etc)
- ❖ Individual and group presentations by students on selected themes

ASSESSMENT FRAMEWORK

Assessment	Written Mode	Oral Mode	Blended Mode
Formative Assessment (10 Marks)	Class Tests, Online Tests, Objective Tests, Class Assignments, Home Assignments, Reports, Infographics; Projects	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Role Playing, Quiz, Think-Pair-Share, Seminar, Interviewing	Presentations, Seminars, Lab assignments, Poster Presentations
Summative Assessment	**Theory (40 Marks)** Semester-end examinations conducted by the university will be considered the mode of summative assessment.		
	Practice (40 + 10(V) Marks) Practical Examination will be conducted by External Examiner		

Note: Teachers can choose any mode of formative assessment based on CLOs

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 Code	LIS-C-504
Course Title	Knowledge Organization and Arrangement: Library Classification (Theory & Practice)
Semester	First
Course Level	500
Total Marks	100
Course Credit	4 (L+T+P=2+0+2=4) Lecture: 20 Hrs+Tutorial:0 Hrs+ Practical: 40 Hrs
Course Learning Outcomes	Upon successful completion of the Knowledge Organization and Arrangement: Library Classification (Theory & Practice) course, students will be able to:
	CLO1: Acquire the concept of library classification and its use CLO2: Discover the mode of formation of universe of subjects CLO3: Acquaint with the classification schemes and their salient features CLO4: Devise class numbers for documents with simple, compound and complex subjects by CC and DDC CLO5: Review current trends in library classification

Unit	Description of Course	
	Theory	**Practice**
Unit I Basics of Classification	Knowledge Organization System (SKOS): Concept, Structure and attributes of Universe of knowledge. Universe of subject; Knowledge and Subject Classification: Definition, need, purpose and importance;	Classification of documents of simple subjects by Colon Classification; Basic Subjects; Complex Subjects; Common Isolate; Space Isolate, Time Isolate, Language Isolate; Use of Devices.
Unit II Theories of Library Classification	Theoretical foundation of Library Classification - History & Development; Models of Library Classification Schemes: Enumerative and faceted - merits and demerits. Mapping and division of knowledge in various schemes of Library Classification with special reference to DDC, Colon Classification and UDC	Classification of documents of complex subjects by Colon Classification; Devices; Common Isolate; Space Isolate, Time Isolate, Language Isolate; Phase Relation.
Unit III Approaches of Classification	Notation: Need, purpose and qualities of notation. Three planes of work (Idea, Verbal and Notational); Modes of formation of subjects : Simple, Compound and Complex Subject; Call numbers, Class numbers, Book numbers, Faceted	Classification of documents by DDC latest edition available with the use of tables and devices.

	Classification, postulational approach to classification, principles of helpful sequence, five fundamental categories and facet analysis and facet sequence; Shelf arrangement, shelf list	
Unit IV **Future Development in Classification**	Library Classification and Computer; Online classification systems, Web Dewey, OCLC classifier, recent development and trends in classification research, automated classification.	Understanding of already worked out class number of books for Main Class, Division, Sections, Construction of call numbers.

SUGGESTED TEACHING LEARNING STRATEGIES

- ❖ Lecture-cum discussion, library readings, critical discussion, comparative analysis
- ❖ Classification of library documents under different complexity levels
- ❖ Guided reading and practice of classification of documents (minimum 25 titles)
- ❖ Demo of online classification system

Assessment Framework

Assessment	Written Mode	Oral Mode	Blended Mode
Formative Assessment (10 Marks)	Class Tests, Online Tests, Classification analyses and worked class numbers, Objective Tests, Classifying the library documents as Class Assignments, Home Assignments	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Role Playing, Quiz, Think-Pair-Share, Seminar	Presentations, Seminars, Poster Presentations
Summative Assessment	**Theory (40 Marks)** Semester-end examinations conducted by the university will be considered the mode of summative assessment.		
	Practice (40 + 10 (V) Marks) The Practical Examination will be the conducted by the Department Separately by External Examiner		

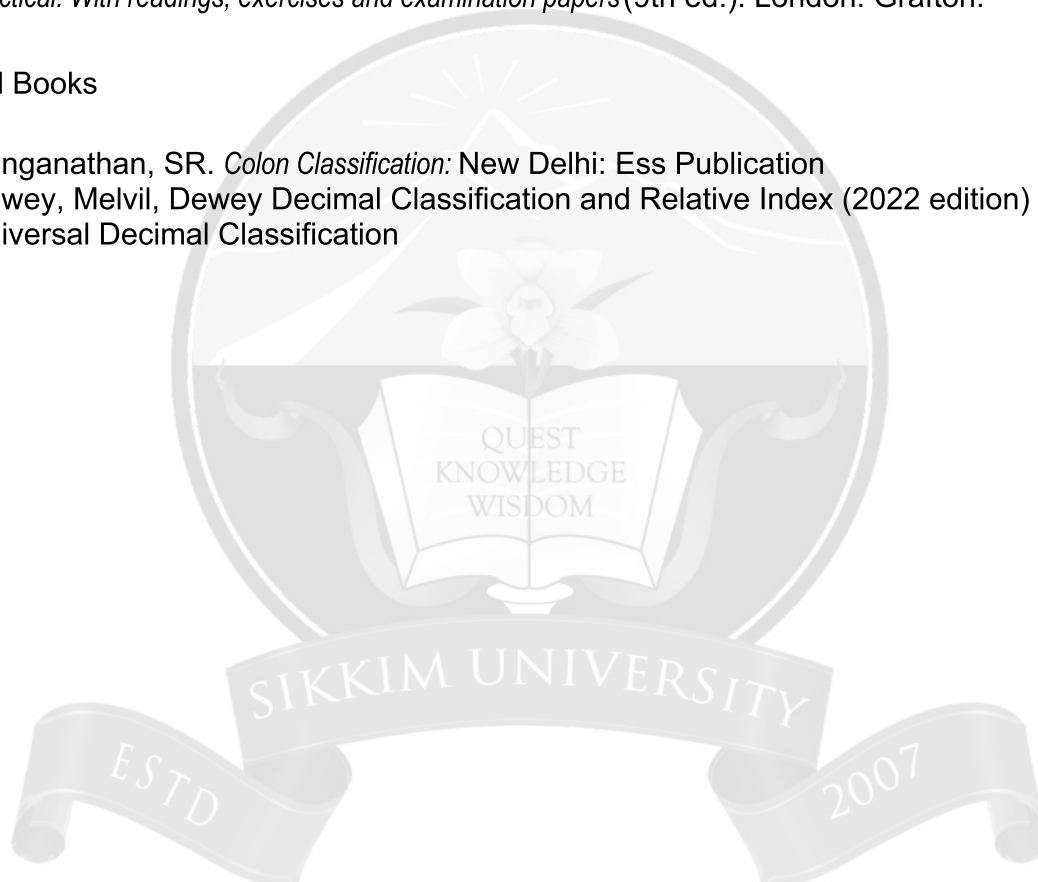**Note:** Teachers can choose any mode of formative assessment based on CLOs

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.

Practical Books

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

FIRST SEMESTER

Course Code	LIS-O-505
Course Title	**Communication and Soft Skills**
Semester	**First**
Course Level	**500**
Total Marks	**100**
Course Credit	**4 (L+T+P=3+1+0=4)** **Lecture: 45 Hrs+Tutorial:15 Hrs+ Practical: 0 Hrs**
Course Learning Outcomes	Upon successful completion of the Communication & Soft Skills course, the students will be able:
	CLO1: Build effective communication skills, both speaking and writing CLO2: Develop effective presentation skills CLO3: Prepare effective business correspondence and reports CLO4: Put to use interpersonal skills, team management skills, and leadership skills
Unit	**Description of Course**
Unit I **Basics of Communication Skills**	Basic concept and need for communication skills; Verbal; Non-Verbal; Visual; Written; Pronunciation: The sounds of English; Word accent; Intonation; Conversation skills (Speaking); Writing Skills: Paragraph writing; Paragraph structure; Principles of making paragraph, summarising, features of good summary; Stages of summarizing; Letter & Resume Writing: Formal and informal letter; Cover letter; Resume.
Unit II **Professional Skills**	Listening skills; Interview skills; Role play; Group discussion; Presentation Skills: Attitude, content, narration, context settings; Public speaking; Body Language; The world of visual culture; Visual perception; The aural: Its relevance and impact; The body and the way it communicates; The face, its expressions and what it says; Time management.
Unit III **ICT Tools**	Tools for interactive presentation: Preparing PPTs, templates, using animations, pie diagrams, tree diagrams, flow charts, tables.
Unit IV **Leadership and Team Building**	Leadership skills; Styles; Negotiation and persuasion skills; Team & group building; Time Management; Johari window. Overview of Continued Professional Development Practices (CDPs)

SUGGESTED TEACHING LEARNING STRATEGIES

- ❖ Lecture-cum discussion, library readings, critical discussion
- ❖ Demonstration of TedX and similar platforms
- ❖ Individual and group presentations by students on selected themes
- ❖ Assignment (resume and report writing; interviews online/off-line)

ASSESSMENT FRAMEWORK

Assessment	Written Mode	Oral Mode	Blended Mode
Formative Assessment (50 Marks)	Class Tests, Online Tests, Article Writing, Objective Tests, Class Assignment, Home Assignments, Resume and Report Writing	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Role Playing, Quiz, Think-Pair-Share, Seminar, Interviewing; Public Speaking	Presentations, Seminars, Field Assignments, Poster Presentations, Portfolios, Surveys, Interviews Online/Off-Line
Summative Assessment (50 Marks)	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

Note: Teachers can choose any mode of formative assessment based on CLOs

Suggested Readings

1. Owen, Hargie, (2006). The Handbook of Communication Skills 3rd Edition. Sussex: Routledge. ISBN: 9781138219120.
2. Richard, Ellis (2002). Communication Skills: Stepladders to success for the professional. Bristol: Intellect Books. ISBN: 9781841502984.
3. Sharma R.C. and Mohan, K. (2017) Business Correspondence and Report Writing. New Delhi: Tata McGraw Hill. ISBN: 9789385965050.
4. M V Rodriques (2013). Effective Business communication. Concept Publishing Company. ISBN: 9788180699290.
5. Jean Naterop and Rod Rexell (1987). Telephoning in English. Cambridge: Cambridge University Press. ISBN: 0521539110.
6. Bauman, R. and J.Sherzer (eds.) (1974). Explorations in the Ethnography of Speaking. Cambridge: Cambridge University Press DOI: https://doi.org/10.1017/S0047404500007053
7. Goffman, E. (1976). Replies and Responses. Language in Society; 5(3) 257-313. https://www.jstor.org/stable/4166887
8. Goody, E.M. (1978). Questions and Politeness: Strategies in Social Interaction. Cambridge: Cambridge University Press. https://doi.org/10.1177/003368828001100209
9. Widdowson, H.G. 1984. Explorations in Applied Linguistics. Oxford: Oxford University Press. ISBN: 9780194370882.
10. Goodale, M. (2005). Professional Presentations. Cambridge: Cambridge University Press. ISBN: 9788175962576.
11. Hodgson, P. & Hodgson, J. (1992). Effective Meetings. London: Century Business. ISBN: 9780712698733.
12. Elizabeth, Kuhnke (2012). Communication Skills for Dummies. Sussex: John Wiley & Sons. ISBN: 9781118401248.
13. Alan, Barker (2000). Improve Your Communication Skills. London: Kogan Page. ISBN: 9781398605824.

FIRST SEMESTER

Course Code	LIS-V-506
Course Title	Indian Traditional Knowledge System
Semester	First
Course Level	500
Total Marks	50
Course Credit	2 (L+T+P=2+0+0=2) Lecture: 30 Hrs+Tutorial:0 Hrs+ Practical: 0 Hrs
Course Learning Outcomes	Upon successful completion of the Indian Traditional Knowledge System course, the students will be able:
	CLO1: Comprehend the rich heritage that resides in our traditions CLO2: Discuss the preservation, conservation and management of Indian knowledge CLO3: Identify the mind/voice dynamic and its function in Indian knowledge systems CLO4: Explain the Indian ethnic communities, their livelihood and local wisdom CLO5: Define the unique traditional practices and applied traditional knowledge
Unit	Description of Course
Unit I Basic Background of ITKS	**Indian Traditional Knowledge System** (ITKS): Introduction, definition, concept and scope; ITKS in ancient and modern India; ITKS and Indian scholars; Indian literature and philosophy; Ancient libraries and information centres; Ancient collection and archives; Indian library professionals and their contribution with special reference to SR Ranganathan.
Unit II Resources and Services of ITKS	Indian Traditional / tribal / ethnic communities, knowledge and wisdom; Geophysical aspects, resources and vulnerability; Resource availability; Utilization pattern and limitations; Socio-cultural linkages with traditional knowledge system; Tangible and intangible cultural heritage.

SUGGESTED TEACHING LEARNING STRATEGIES

❖ Lecture-cum discussion & tutorials, library readings, comparative analysis
❖ Literature reviews, discussion
❖ Visit to cultural centres and understanding of resources and services

Assessment Framework

Assessment	Written Mode	Oral Mode	Blended Mode
Formative Assessment (25 Marks)	Class Test, Open Book Test, Online Test, Article Writing, Objective Test, Class Assignment, Home Assignment, Annotated Bibliographies, Reports	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Role Playing, Quiz, Think-Pair-Share, Seminar	Presentations, Seminars, Field Assignments, Poster Presentations
Summative Assessment (25 Marks)	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

Note: Teachers have choice of mode of formative assessment based on CLOs

Suggested Readings

1. Jha, Amit (2022). Traditional Knowledge System in India. New Delhi: Atlantic Publishers and Distributors (P) Ltd. ISBN: 9788126912230.
2. Mohanta, B. K. and Singh V. K. (2012) Traditional Knowledge System and Technology in India. ISBN: 9788177023107.
3. Johnson, M. (1992). Research on Traditional Environmental Knowledge: Its development and its Role. In Lore: Capturing Traditional Environmental Knowledge, by M. (ed.) Johnson. Ottawa: IDRC.
4. Maundu, P. (1995). Methodology for Collecting and Sharing Indigenous Knowledge: A Case Study. Indigenous Knowledge and Development Monitor 3 (2), 25-27.
5. Agrawal, Arun. 2002. Indigenous knowledge and the politics of classifcation. International Social Science Journal 54 (173): 287–297.
6. Anilkumar, Shraddha. 2018. Traditional knowledge digital library: An imitative to protect India's traditional knowledge. International Journal of Applied and Advanced Scientifc Research 3 (2): 43–45.

SECOND SEMESTER

Course Code	LIS-C-551
Course Title	Library Management and Operations
Semester	Second
Course Level	500
Total Marks	100
Course Credit	4 (L+T+P=3+1+0=4) Lecture: 45 Hrs+Tutorial:15 Hrs+ Practical: 0 Hrs
Course Learning Outcomes	After studying the course Library Management and Operations, the students shall be able to:
	CLO1: Acquire the concept of management, function, and characteristics CLO2: Apply the management techniques in library financial management, human resource management, and space management CLO3: Define the routine library operations - acquisition, processing, maintenance CLO4: Build library resources, both electronic and print, and its management CLO5: Evaluate the usage report of library resources
Unit	**Description of Course**
Unit I Basics of Management	Concept of Library Management: Principles and practices. Scientific management; MBO, SWOT analysis; Personnel Management; Manpower Planning: Job analysis, job description, job specification, performance evaluation; Leadership and motivation.
Unit II Project Management	Project Management; PERT/CPM; Quality management and certification; Change management; Library Finance – Planning and Budgeting; Library Building: Functional/Modular library building; Green building.
Unit III Resource Management	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 and Reports	Maintenance: Shelving; Shelf reading and rectification; Stock verification, library statistics, annual report; User Management: Circulation functions: Registration, issue, return, renewal, reservation, fines.

SUGGESTED TEACHING LEARNING STRATEGIES

❖ Lecture-cum discussion & tutorials, library readings, comparative analysis

❖ Literature reviews, discussion, case studies
❖ Individual and group presentations by students on selected themes
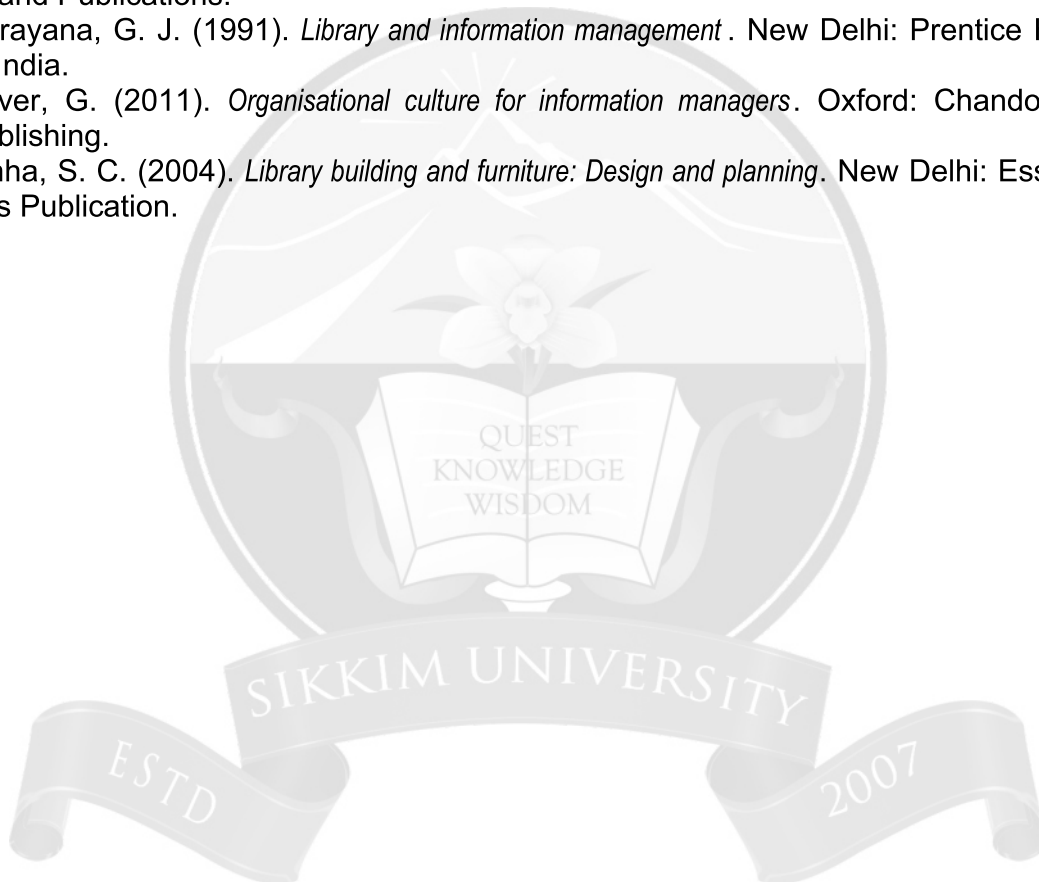❖ Visit to local libraries and information centres, tour diary

Assessment Framework

Assessment	Written Mode	Oral Mode	Blended Mode
Formative Assessment (30+20 Tour Diary)	Class Test, Open Book Test, Online Test, Article Writing, Objective Test, Class Assignment, Home Assignment, Annotated Bibliographies, Reports, Portfolios, Book Review, Article Review, Tour Diary	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Role Playing, Quiz, Think-Pair-Share, Seminar	Presentations, Seminars, Field Assignments, Poster Presentations, Portfolios
Summative Assessment (50 Marks)	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

Note: Teachers can choose any mode of formative assessment based on CLOs

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 Code	LIS-C-552
Course Title	Library Automation and Networking (Theory & Practice)
Semester	Second
Course Level	500
Total Marks	100
Course Credit	**4 (L+T+P=2+0+2=4)** **Lecture: 20 Hrs+Tutorial:0 Hrs+ Practical: 40 Hrs**
Course Learning Outcomes	After studying the Library Automation and Networking, the student shall be able to learn:
	CLO1: Outline the meaning, purpose and process of the library automation CLO2: Evaluate the selection process of various software for library automation CLO3: Plan and implement library automation using open source software CLO4: Initiate a computerized information system in an automated housekeeping operation CLO5: Create a networking infrastructure for web-based information services and activities

Unit	Description of Course	Practical
Unit I **Overview of Automation**	Introduction to library automation; Historical perspective, need and purpose; Approaches to library automation.	Understanding of library housekeeping operations.
Unit II **Planning and Execution**	Management of Library Automation: Planning; Library automation software; Choosing library automation software; Evaluation of the software; Implementation; Open-source library **automation** software v/s Propriety software.	Different mechanism of hardware and software selection; Overview of KOHA and SOUL.
Unit III **Housekeeping Operations**	Automated Housekeeping Operations: Acquisition; Cataloguing; Circulation; Serial control; Budget; Reports; Retrospective conversion; Data migration	Practical training related to housekeeping operations.
Unit IV **Networking**	Computerised Information Services and Networking: Computerized alerting services; Automated cataloguing; Z39.50; MARC; Network software; Web based automation (cloud based).	Understanding and demonstration of networked based services.

SUGGESTED TEACHING LEARNING STRATEGIES

- ❖ Lecture-cum discussion & tutorials, library readings, comparative analysis
- ❖ Literature reviews, discussion, case studies
- ❖ Hands on practices of library housekeeping operations
- ❖ Practical training of automation software

Assessment Framework

Assessment	Written Mode	Oral Mode	Blended Mode
Formative Assessment (10 Marks)	Class Test, Open Book Test, Online Test, Article Writing, Objective Test, Class Assignment, Home Assignment, Annotated Bibliographies, Reports, Portfolios, Book Review, Software Reviews; Hands on Assignments	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Role Playing, Quiz, Think-Pair-Share, Seminar	Presentations, Seminars, Field Assignments, Poster Presentations
Summative Assessment	**Theory (40 Marks)** Semester-end examinations conducted by the university will be considered the mode of summative assessment.		
	Practice (40+10(V) Marks) The Practical Examination shall be conducted by External Examiner		

Note: Teachers can choose any mode of formative assessment based on CLOs

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 Code	**LIS-C-553**
Course Title	**Knowledge Organization and Description: Library Cataloguing (Theory & Practice)**
Semester	**Second**
Course Level	**500**
Total Marks	**100**
Course Credit	**4 (L+T+P=2+0+2=4)** **Lecture: 20 Hrs+Tutorial:0 Hrs+ Practical: 40 Hrs**
Course Learning Outcomes	Upon successful completion of the Knowledge Organization and Description: Library Cataloguing course, students will be able to:
	CLO1: Acquire the concept of a library catalogue and its functions CLO2: Interpret the different elements of a catalogue entries CLO3: Use the catalogue codes and standards for knowledge processing, bibliographic description and controlled vocabulary CLO4: Construct various catalogue entries using AACR2 for book and non-book materials CLO5: Recognize various approaches of deriving subject headings using various tools
Unit	**Description of Course**

Unit	Theory	Practice
Unit I **Library Catalogue Basics**	Library Catalogue: Types and functions; Historical Background; Document description according to AACR2; Cataloguing of various types of information resources (printed, non-printed and electronic), Introduction to Classified/Alphabetical Catalogue.	Preparing catalogue Entries as per AACR2 (Main entry, added entry); Authorship: Single personal authorship, joint authorship, works of more than three authors, collaborative works, pseudonymous authors.
Unit II **Standards**	RDA; Standards for machine readable bibliographic records – ISO 2709/Z39.2/Z39.50; SRU/SRW; MARC family of formats, XML, role of Law of Osmosis and Retro conversion, Standards for Bibliographic Description: ISBDs, FRBR, Dublin Core, ISSN, ISBN; DOI.	Corporate Authorship: Government organizations, institutions, societies; Series; Multivolume works; Composite works; Uniform titles; Sacred scripture; Anonymous works using AACR2.
Unit III **Indexing and Vocabulary Control**	Subject cataloguing and content analysis; Latest editions of Library of Congress Subject Headings List (LCSHL), Sears List of Subject Headings (SLSH); Chain Indexing; Thesaurus; Thesaurofacet.	Preparing catalogue entries (main, added and reference entries) for non-book materials and serials using AACR2.
Unit IV **Advanced Cataloguing**	Preparation of bibliographic records; Use of ISBN, ISSN in copy cataloguing from Library of Congress, Columbia University Catalogue, British Library, OCLC and other national and international	Cartographic Materials; Manuscript; Motion Pictures, Video Recording, Devices Serial publication by using AACR2;

	catalogues; Web OPAC and its functions; BIBFRAME; OCLC, WorldCat, IndCat, NERCAT.	An overview of Classified Catalogue Code (Not for evaluation)

SUGGESTED TEACHING LEARNING STRATEGIES

- ❖ Lecture-cum discussion & tutorials, library readings, comparative analysis
- ❖ Literature reviews, discussion, case studies
- ❖ Practice of cataloguing by preparing various catalogue entries
- ❖ Hands-on training of advanced cataloguing

Assessment Framework

Assessment	Written Mode	Oral Mode	Blended Mode
Formative Assessment (10 Marks)	Class Test, Open Book Test, Online Test, Article Writing, Objective Test, Class Assignment, Home Assignment, Annotated Bibliographies, Reports, Portfolios, Book Review, Search and Retrieval Protocols and Standards; Catalogue Practice	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Role Playing, Quiz, Think-Pair-Share, Seminar	Presentations, Seminars, Field Assignments, Poster Presentations
Summative Assessment	**Theory (40 Marks)** Semester-end examinations conducted by the university will be considered the mode of summative assessment.		
	Practice (40+10(V) Marks) External Examiner shall conduct the Practical Examination		

Note: Teachers can choose any mode of formative assessment based on CLOs

Suggested Readings

Theory

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 Cata loguing 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

Practical

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. 4. Girja Kumar, &Krishan Kumar. (1988). Theory of cataloguing. 5th ed. New Delhi: Vikas.

5. International Federation of Library Associations and Institutions., & International Federation of Library Associations and Institutions. (2011). ISBD: International Standard Bibliographic Description. Berlin: De Gruyter Saur.

6. Joint Steering Committee for Revision of AACR, & American Library Association. (2005). Anglo American cataloguing rules. (2nd ed). (1988). Chicago: American Library Association.

7. Library of Congress. (2000). MARC 21 concise format for bibliographic data. Washington D.C.: Library of Congress, Network Development and MARC Standards Office.

8. Maxwell, Robert L. (2014). Maxwell's handbook for RDA: Explaining and illustrating RDA: resource description and access using MARC 21. London: Facet.

9. 5. Miller, J. (2011). Sear's list of subject headings. 21st ed. New York: H.W. Wilson.

7. Oliver, C. (2010). Introducing RDA: a guide to the basics. American Library Association

8. Ranganathan, S. R. (1964). Classified Catalogue Code with additional rules for Dictionary

9. Ranganathan, S. R. (1974). Cataloguing practice. 2nd ed. Bombay: Asia.

10. Richard, Gartner (2016). Metadata: knowledge from antiquity to the semantic web. London: Springer.

11. Welsh, A., &Batley, S. (2012). Practical Cataloguing: AACR, RDA and MARC 21. Facet Publishing.

SECOND SEMESTER

Course Code	LIS-E-554
Course Title	**Marketing of Library and Information Services**
Semester	**Second**
Course Level	**500**
Total Marks	**100**
Course Credit	**4 (L+T+P=3+1+0=4)** **Lecture: 45 Hrs+Tutorial:15 Hrs+ Practical: 0 Hrs**
Course Learning Outcomes	Upon successful completion of the Marketing of Library and Information Services course, the students will be able to:
	CLO1: Define the concept of the information economy CLO2: Analyze marketing strategies in the context of library CLO3: Identify and understand the concept of digital and electronic marketing CLO4: Determine the methods of marketing library and information products and services CLO5: Develop marketing skills effectively to create, implement, and evaluate public relations, publicity, promotional activities
Unit	**Description of Course**
Unit I Information as Commodity	Information economics; Economics of information; Information as a commodity, Information as a resource and information as a factor of production; Matchup's model of production and distribution of knowledge; Economic analysis models and their application to information industry; Cost Benefit and Cost Effectiveness Analysis
Unit II Information Marketing	Marketing of Information: Concept, importance, marketing plan, marketing strategies, marketing of information products and services-planning and processes; Marketing as philosophy approach; Marketing Mix; 6Ps of Marketing.
Unit III Digital Marketing	Digital Marketing: E-Marketing, Email marketing, publicity, promotion, branding, advertizing; Social media marketing and strategies; Service marketing (with Special Focus on Libraries and Information Centres).
Unit IV Marketing Skills	Marketing Skills and Public Relations: Marketing planning and strategy; USPs; Public relations and liaisoning with library authority and patrons; User satisfaction.

SUGGESTED TEACHING LEARNING STRATEGIES

❖ Lecture-cum discussion & tutorials, library readings, comparative analysis
❖ Literature reviews, discussion, case studies
❖ Creation of promo (posters; pamphlet design) and presentations
❖ Review of marketing practices by different libraries, library websites; social media handles

Assessment Framework

Assessment	Written Mode	Oral Mode	Blended Mode
Formative Assessment (50 Marks)	Class Test, Open Book Test, Online Test, Article Writing, Objective Test, Class Assignment, Home Assignment, Annotated Bibliographies, Reports, Portfolios, Book Review, Website Reviews	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Role Playing, Quiz, Think-Pair-Share, Seminar	Presentations, Seminars, Field Assignments, Poster Presentations
Summative Assessment (50 Marks)	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

Note: Teachers can choose any mode of formative assessment based on CLOs

Suggested Readings

1. Rowley, J. (2001). *Information marketing*. Aldershot: Ashgate Publishing Limited.
2. Mcgarry , K .J. (1981). *The changing concept of information*. London: Bingley.
3. Weinberg, T. (2009). The *new community rules: marketing on the social web*. Sebastopol: O'reilly Media.
4. Vickery, B. C. & Vickery, A. (1990). *Information science in theory and practice*. Butterworth's.
5. Carpenter, J. & Davies R. (1992). Quantification of the overseas consulting market for professional consultancy services in librarianship and information science and information management. London: Research and Development, British Library.
6. Coote, H., Batchelor, B. (1998). How to market your library service. London: Aslib. Effectively. http://ci.nii.ac.jp/ncid/BA39389214
7. Gupta, D. K. (2006). Marketing library and information services: International perspectives. Munich: K.G. Saur.
8. Helinsky, Z. (2008). A short-cut to marketing the library. Oxford: Chandos Publishing.
9. Jain, A. K. [et al.]. (1999). Marketing information products and services: a primer for libraries and information professionals. New Delhi: Tata McGraw-Hill.
10. Kotler, P. (2002). Marketing management (12th ed.). Delhi: Prentice Hall.
11. Kotler, P., & Armstrong, G. M. (2012). Principles of marketing. New Delhi: Prentice Hall.
12. Kotler, P., Kartajaya, H., & Setiawan, I. (2019). Marketing 4.0: moving from traditional to digital. In WORLD SCIENTIFIC eBooks (pp. 99–123). https://doi.org/10.1142/9789813275478_0004
13. Rowley, J. (2001). Information marketing. London: Ashgate.
14. Schmidt, J. (2006). Marketing library and information services: International perspectives. In De Gruyter eBooks. https://doi.org/10.1515/9783598440199

SECOND SEMESTER

Course Code	LIS-E-555
Course Title	Tribal Information, Archive, and Museum
Semester	Second
Course Level	500
Total Marks	100
Course Credit	4 (L+T+P=3+1+0=4) Lecture: 45 Hrs+Tutorial:15 Hrs+ Practical: 0 Hrs
Course Learning Outcomes	After completion of the Tribal Information, Archive and Museum course, the student will be able to:
	CLO1: Comprehend the nature of the tribal information CLO2: Identify various information specific to tribal communities in India CLO3: Locate and retrieve various information resources related to tribes CLO4: Discover information resources related to tribes CLO5: Identify the process of preserving tribal information CLO6: Acquire the concept of museums and institutions associated with the tribal information.
Unit	**Description of Course**
Unit I Overview of Tribal Society	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	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 Tribal Community and Libraries	Libraries and tribal community; Tribal libraries and information centres in India; Digital collection; Managing audio-visual collection; ICT applications; Traditional knowledge management, Intellectual property rights in traditional knowledge.
Unit IV Archives and Museums	Archives: Meaning and purpose; Process of developing archives; Archiving policies and procedures; Functions and contents of tribal archives; Museums: Meaning, purpose, activities; Managing collection; Preservation; Cataloguing of collections; User services; National Museum, Namgyal Institute of Tibetology, etc. (Local and National Importance), Assam Institute of Research for Tribals and Scheduled Castes, Assam; Central Institute of Higher Tibetan Studies, Sarnath

SUGGESTED TEACHING LEARNING STRATEGIES

- ❖ Lecture-cum discussion & tutorials, library readings, comparative analysis
- ❖ Literature reviews, discussion, case studies
- ❖ Review of activities of important museums and archives

❖ Visit to centres and institutions

Assessment Framework

Assessment	Written Mode	Oral Mode	Blended Mode
Formative Assessment (50 Marks)	Class Test, Open Book Test, Online Test, Article Writing, Objective Test, Class Assignment, Home Assignment, Annotated Bibliographies, Reports, Institutional Visits	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Role Playing, Quiz, Think-Pair-Share, Seminar	Presentations, Seminars, Field Assignments, Poster Presentations
Summative Assessment (50 Marks)	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

Note: Teachers have choice of mode of formative assessment based on CLOs

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

SECOND SEMESTER

Course Code	LIS-E-556
Course Title	Information, Media and Data Literacy
Semester	Second
Course Level	500
Total Marks	100
Course Credit	4 (L+T+P=3+1+0=4) Lecture: 45 Hrs+Tutorial:15 Hrs+ Practical: 0 Hrs
Course Learning Outcomes	Upon successful completion of the Information, Media and Data Literacy course, the students will be able to:
	CLO1: Find, evaluate, manage, curate, organize and share digital information, including open content CLO2: Recognize the media messages and their creators, bias, spin, misinformation, and false information CLO3: Illustrate the various channels of media and information and their evaluation CLO4: Develop digital capabilities and framework for well-being in relation to media ownership, legal, ethical, and societal issues
Unit	Description of Course
Unit I Information Literacy	Information Literacy: Meaning, definition, concepts, need and objectives; Historical background; Information literacy models; Information literacy standards; Imparting information literacy.
Unit II User Education	User Education: Definition, components, objectives, methods; Historical development; Information technology and user education; Evaluation of a user education programme.
Unit III Media Literacy	Media Literacy: Concept, definition; Development of Traditional and New Media: meaning, types and characteristics; Fusion between traditional and new media; Media communication; Social responsibility, Wise use of information.
Unit IV Data Literacy and Digital Capabilities	Data Literacy: Concept, type; Digital data formats; Digital Capabilities: Framework, elements, index; Digital identity and well-being; Safety and responsibility in digital environments; Digital stress; Workload and distraction; Digital learning and personal/professional development.

SUGGESTED TEACHING LEARNING STRATEGIES

- ❖ Lecture-cum discussion & tutorials, library readings, comparative analysis
- ❖ Literature reviews, discussion, case studies
- ❖ Demonstration of data literacy activities
- ❖ Review of models and frameworks

Assessment Framework

Assessment	Written Mode	Oral Mode	Blended Mode
Formative Assessment (50 Marks)	Class Test, Open Book Test, Online Test, Article Writing, Objective Test, Class Assignment, Home Assignment, Annotated Bibliographies, Reports, Models and Framework Reviews	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Role Playing, Quiz, Think-Pair-Share, Seminar	Presentations, Seminars, Field Assignments, Poster Presentations
Summative Assessment (50 Marks)	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

Note: Teachers have choice of mode of formative assessment based on CLOs

Suggested Readings

1. Armstrong, S. (2008). *Information Literacy: Navigating & evaluating today's Media*. California: Shell Education.
2. Christian, S. E. (2019). *Everyday media literacy: an analog guide for your digital life* Routledge.
3. Hobbs, R. (2021). *Media literacy in action: Questioning the media*. Rowman & Littlefield Publishers.
4. Kellner, D., & Share, J. (2019). *The critical media literacy guide: Engaging media and transforming education*. Brill.
5. Leaning, M. (2017). *Media and information literacy: An integrated approach for the 21st century*. Chandos Publishing.
6. Oberg, D., & Ingvaldsen, S. (Eds.). (2016). *Media and information literacy in higher education: Educating the educators*. Chandos Publishing.

SECOND SEMESTER

Course Code	LIS-V-557
Course Title	Cyber Security
Semester	Second
Course Level	500
Total Marks	50
Course Credit	2 (L+T+P=2+0+0=2) Lecture: 30 Hrs+Tutorial:0 Hrs+ Practical: 0 Hrs
Course Learning Outcomes	Upon successful completion of the Cyber Security course, the students will be able to:
	CLO1: Comprehend the basic terminologies related to cyber security and current cyber security threat landscape. CLO2: Understanding of the cyberattacks that target computers, mobiles and persons. They will also develop understanding about the type and nature of cyber crimes and as to how report these crimes through the prescribed legal and Government channels CLO3: Understand the legal framework that exist in India for cyber crimes and penalties and punishments for such crimes, It will also expose students to limitations of existing IT Act,2000 legal framework that is followed in other countries and legal and ethical aspects related to new technologies CLO4: Understand the aspects related to personal data privacy and security. They will also get insight into the Data Protection Bill, 2019 and data privacy and security issues related to social media platforms. CLO5: Understand the main components of cyber security plan. They will also get insights into risk based assessment, requirement of security controls and need for cyber security audit and compliance
Unit	Description of Course
Unit I Overview of Cyber security	Cyber security increasing threat landscape; Cyber security terminologies- protection of end user machine; Critical IT and national critical infrastructure; Cyber crimes targeting computer systems and mobiles; Online scams and frauds, Social media scams and frauds; Cyber crime and legal landscape around the world, IT Act, 2000: Amendments, limitations; Cyber crime and punishments; Cyber Laws: Legal and ethical aspects related to new technologies; Cyber laws of other countries.
Unit II Data Protection and Security	Data protection, Data privacy and data security; Personal Data Protection Bill and its compliance; Data protection principles; General Data Protection Regulations (GDPR), 2016; Personal Information Protection and Electronic Documents Act (PIPEDA); Social media- data privacy and security issues; Cyber Security: Plan, policy, cyber crises management plan; Business continuity; Risk assessment; Types of security controls and their goals; Cyber security audit and compliance; National cyber security

policy and strategy.	

SUGGESTED TEACHING LEARNING STRATEGIES

- ❖ Lecture-cum discussion & tutorials, library readings, comparative analysis
- ❖ Literature reviews, discussion
- ❖ Case studies

Assessment Framework

Assessment	Written Mode	Oral Mode	Blended Mode
Formative Assessment (25 Marks)	Class Test, Open Book Test, Online Test, Article Writing, Objective Test, Class Assignment, Home Assignment, Annotated Bibliographies, Reports, Guidelines and Principles	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Role Playing, Quiz, Think-Pair-Share, Seminar,	Presentations, Seminars, Field Assignments, Poster Presentations,
Summative Assessment (25 Marks)	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

Note: Teachers have choice of mode of formative assessment based on CLOs

Suggested Readings

1. Cyber Crime Impact in the New Millennium, by R. C Mishra , Auther Press. Edition 2010.
2. Cyber Security Understanding Cyber Crimes, Computer Forensics and Legal Perspectives by Sumit Belapure and Nina Godbole, Wiley India Pvt. Ltd. (First Edition, 2011)
3. Security in the Digital Age: Social Media Security Threats and Vulnerabilities by Henry A. Oliver, Create Space Independent Publishing Platform. (Pearson , 13th November, 2001)
4. Electronic Commerce by Elias M. Awad, Prentice Hall of India Pvt Ltd.
5. Cyber Laws: Intellectual Property & E-Commerce Security by Kumar K, Dominant Publishers.
6. Network Security Bible, Eric Cole, Ronald Krutz, James W. Conley, 2nd Edition, Wiley India Pvt. Ltd.
7. Fundamentals of Network Security by E. Maiwald, McGraw Hill
8. Cyber Security Understanding Cyber Crimes, Computer Forensics and Legal Perspectives by Sumit Belapure and Nina Godbole, Wiley India Pvt. Ltd.
9. Information Warfare and Security by Dorothy F. Denning, Addison Wesley.
10. Security in the Digital Age: Social Media Security Threats and Vulnerabilities by Henry A. Oliver, Create Space Independent Publishing Platform.
11. Data Privacy Principles and Practice by Natraj Venkataramanan and Ashwin Shriram, CRC Press.
12. Information Security Governance, Guidance for Information Security Managers by W. KragBrothy, 1st Edition, Wiley Publication.
13. Auditing IT Infrastructures for Compliance By Martin Weiss, Michael G. Solomon, 2nd Edition, Jones Bartlett Learning

THIRD SEMESTER

Course Code	LIS-C-601
Course Title	Research Methodology in Library and Information Science
Semester	Third
Course Level	600
Total Marks	100
Course Credit	4 (L+T+P=3+1+0=4) Lecture: 45 Hrs+Tutorial:15 Hrs+ Practical: 0 Hrs
Course Learning Outcomes	After studying the Research Methodology in Library and Information Science course, the student will be able to:
	CLO1: Acquire an understanding of research and methods CLO2: Recognize various steps of conducting research CLO3: Apply the tools for the purpose of collecting and analysing data CLO4: Write scholarly publication as a research output CLO5: Practice ethical values to avoid Plagiarism in research
Unit	❖ Description of Course
Unit I Fundamentals of Research Methods	Research Methods in Library and Information Science: Meanings, objectives, types and significance; Research Problem: Identification and selection; Research Ethics; Research Design: Basic principles, types; Sampling techniques; Hypotheses formulation & testing.
Unit II Data Analysis	Data Collection and Analysis Methods: 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, NVIVO.**
Unit III Academic Writing	Elements of academic writing; Writing a scientific paper; Scientific reporting; Citation Styles and referencing; Reference Management Software; Journal Selection Tools; Journal Submission System; Review, Editing. Different sections of a publication, Templates
Unit IV Ethics & Misconduct	Publication ethics and misconduct; COPE and WAME; UGC Guidelines (2018); Predatory Publications; Plagiarism; **Types of plagiarism;** Plagiarism Detection Software – URKUND (OURIGINAL), TURNITIN

SUGGESTED TEACHING LEARNING STRATEGIES

❖ Lecture-cum discussion & tutorials, library readings, comparative analysis
❖ Literature reviews, discussion, case studies
❖ Demonstration of software tools
❖ Analysis of referencing & citation styles

❖ Review of standards and guidelines of academic writing

Assessment Framework

Assessment	Written Mode	Oral Mode	Blended Mode
Formative Assessment (50 Marks)	Class Test, Open Book Test, Online Test, Article Writing, Objective Test, Class Assignment, Home Assignment, Annotated Bibliographies, Reports, Use of Style Guides, Tools	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Role Playing, Quiz, Think-Pair-Share, Seminar	Presentations, Seminars, Field Assignments, Poster Presentations
Summative Assessment (50 Marks)	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

Note: Teachers have choice of mode of formative assessment based on CLOs

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 Code	LIS-C-602
Course Title	Digital Library Development (Theory & Practice)
Semester	Third
Course Level	600
Total Marks	100
Course Credit	4 (L+T+P=2+0+2=4) Lecture: 20 Hrs+Tutorial:0 Hrs+ Practical: 40 Hrs
Course Learning Outcomes	After studying the Digital Library Development course, the student will be able to:
	CLO1: Acquire the concept of digital libraries CLO2: Identify methods of developing a digital library CLO3: Develop digital collection using different tools and techniques CLO4: Manage digital content using different tools and techniques CLO5: Plan collection development and preservation strategies
Unit	Description of Course
Unit I Concept of Digital Library	Digital Library: Concept and features; Historical developments of digital libraries; Component and elements of digital libraries (digital objects – text, image, audio, video); Networks.
Unit II Digital Library Collection Development	Architecture and Workflow: Open Archival Information System (OAIS) model, Archival Information Package (AIP), Submission Information Package (SIP), Dissemination Information Package (DIP); Digital library developments; Digital Curation, Digital Curation Centre (DCC); Collection development, collection development policies, preservation, content selection, digitization, techniques, software; OCR; Digitization v/s Digitalization; Institutional Repositories: Concepts and application.
Unit III Digital Library Standards and Searching	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 IV Digital Rights Management	Digital Library Software: DSpace, EPrints; Major digital library initiatives (National and International); Digital library service model; IPR: Copyright, DRM; Preservation Metadata: PREMIS; Handles CNRI, DOI, Registry of Digital Repository (Open DOAR).

SUGGESTED TEACHING LEARNING STRATEGIES

- ❖ Lecture-cum discussion & tutorials, library readings, comparative analysis
- ❖ Literature reviews, discussion, case studies
- ❖ Demonstration of digital collection development, content curation
- ❖ Hands-on practice on digital library software

Assessment Framework

Assessment	Written Mode	Oral Mode	Blended Mode
Formative Assessment (10 Marks)	Class Test, Open Book Test, Online Test, Article Writing, Objective Test, Class Assignment, Home Assignment, Annotated Bibliographies, Practical Assignments About Software Use	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Role Playing, Quiz, Think-Pair-Share, Seminar	Presentations, Seminars, Field Assignments, Poster Presentations
Summative Assessment	**Theory (40 Marks)** Semester-end examinations conducted by the university will be considered the mode of summative assessment.		
	Practice (40+10V) Practical examination conducted by the department and external examiner		

Note: Teachers have choice of mode of formative assessment based on CLOs

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.

THIRD SEMESTER

Course Code	LIS-C-603
Course Title	Information Storage and Retrieval
Semester	Third
Course Level	600
Total Marks	100
Course Credit	4 (L+T+P=3+1+0=4) Lecture: 45 Hrs+Tutorial:15 Hrs+ Practical: 0 Hrs
Course Learning Outcomes	After studying the Information Storage and Retrieval course, the student will be able
	CLO1: Define information storage and retrieval system CLO2: Identify various storage and retrieval techniques in day-to-day activities CLO3: Explain different stages of intellectual operations in the subject indexing process CLO4: Apply web-based information retrieval techniques for searching CLO5: Explain the major criteria for evaluation of the ISAR system
Unit	**Description of Course**
Unit I Basics of IR System	Information Retrieval (IR) System: Concept, definition, types, 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	Indexing and Abstracting Systems; Subject Indexing System: Meaning, purpose, origin, development; Pre-coordinate (PRECIS) and post-coordinate indexing (POPSI); Key-Word Indexing: KWIC, KWOC, KWAC; Evaluation of Indexing Process.
Unit III Vocabulary Control	Vocabulary Control: Thesaurus and Thesaurofacet- definition, purpose, construction; Information retrieval models and queries; Evaluation of retrieval systems such as precision, recall, etc.
Unit IV Information Systems	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: Web of Science; SCOPUS, J-Gate; EBSCO Host, PubMed, AGRIS; Semantic Web; Ontology; Linked Data; Big Data; Data Mining; Artificial Intelligence / Machine Learning in IR.

SUGGESTED TEACHING LEARNING STRATEGIES

- ❖ Lecture-cum discussion & tutorials, library readings, comparative analysis
- ❖ Literature reviews, discussion, case studies
- ❖ Demonstration of IR activities
- ❖ Review of IR systems

Assessment Framework

Assessment	Written Mode	Oral Mode	Blended Mode
Formative Assessment (50 Marks)	Class Test, Open Book Test, Online Test, Article Writing, Objective Test, Class Assignment, Home Assignment, Annotated Bibliographies, Reports, Review of IR Systems	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Role Playing, Quiz, Think-Pair-Share, Seminar	Presentations, Seminars, Field Assignments, Poster Presentations
Summative Assessment (50 Marks)	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

Note: Teachers have choice of mode of formative assessment based on CLOs

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 Code	**LIS-C-604**
Course Title	**Database and Content Organisation System (Theory & Practice)**
Semester	**Third**
Course Level	**600**
Total Marks	**100**
Course Credit	**4 (L+T+P=2+0+2=4)** **Lecture: 20 Hrs+Tutorial:0 Hrs+ Practical: 40 Hrs**
Course Learning Outcomes	After studying the Database and Content Organization System, the student will be able to:
	CLO1: Acquire the fundamentals of databases and database management systems CLO2: Design and model efficient and well-structured databases CLO3: Utilize SQL for querying and manipulating data in databases CLO4: Apply databases, including backup, recovery, and performance optimization
Unit	**Description of Course**
Unit I **DBMS Overview**	Overview of Database Management System (DBMS); Relational database model, tables and relationships; Entity-relationship modelling; ER diagrams; Database normalization and data integrity; SQL basics and querying databases.
Unit II **Database Design**	Database Design: Conceptual, logical, physical; Indexing and performance optimization; Database security and access control; Case study of MySQL.
Unit III **Database Administration**	Database administration; Backup and recovery strategies; Monitoring and optimizing database performance; Data migration and transformation; Managing users, roles, and permissions; Database replication and synchronization
Unit IV **Content Management**	Web Database Architectures: Client-server and three-tier; Server-side scripting for dynamic web pages; Web scripting and frameworks: HTML, XML; CSS, PHP, Java Scripts, Django, Bootstrap; Connecting front-end and back-end; Deployment of web application; Content Management System: WordPress, Joomla, Drupal, SubjectsPlus; LMS: Introduction to

System (CMS)	Moodle.

SUGGESTED TEACHING LEARNING STRATEGIES

- ❖ Lecture-cum discussion & tutorials, library readings, comparative analysis
- ❖ Literature reviews, discussion, case studies
- ❖ Demonstration of CMS
- ❖ Review of models and frameworks

Assessment Framework

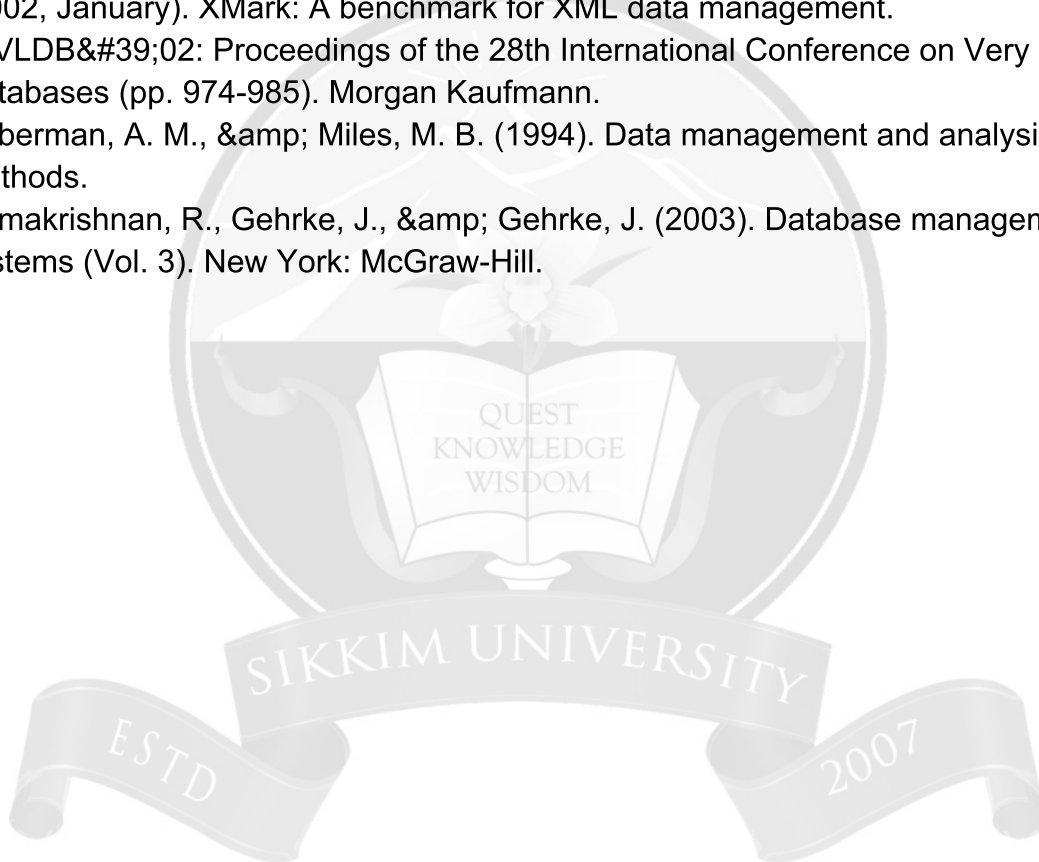| Assessment	Written Mode	Oral Mode	Blended Mode
Formative Assessment (10 Marks)	Class Test, Open Book Test, Online Test, Article Writing, Objective Test, Class Assignment, Home Assignment, Annotated Bibliographies, Reports, Practice Related to the Contents	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Role Playing, Quiz, Think-Pair-Share, Seminar	Presentations, Seminars, Field Assignments, Poster Presentations
Summative Assessment	**Theory (40 Marks)** Semester-end examinations conducted by the university will be considered the mode of summative assessment.		
	Practice (40+10(V) Marks) Practical examination will be conducted by Department with External Examiner		

Note:
1. This paper will be run in collaboration with Computer Applications Department and as an Adjunct Faculty arrangement
2. Teachers have choice of mode of formative assessment based on CLOs

Suggested Reading

1. Barker, D. (2016). Web content management: Systems, features, and best practices. Boston : O'Reilly, 2016. https://www.oreilly.com/library/view/web-content-management/9781491908112/ch01.html
2. McKeever, S. (2003). Understanding web content management systems: Evolution, lifecycle and market. Industrial Management and Data Systems, 103(8-9), 686-692. doi:10.1108/02635570310506106
3. Boiko, B. (2001). Understanding content management. Bulletin of the American Society for Information Science and Technology, 28(1), 8.
4. Historical yearly trends in the usage of content management systems https://w3techs.com/technologies/history_overview/content_management/all/y
5. Market share yearly trends for content management systems https://w3techs.com/technologies/history_overview/content_management/ms/y

6. Drupal Vs WordPress Vs Joomla: Which is the best CMS Platform in 2019? https://themegrill.com/blog/drupal-vs-wordpress-vs-joomla/

7. So, Which CMS Do You Want? https://www.wyoming-interactive.com/blog/show/which-content-management-system

8. Hoffer, J. A., Prescott, M. B., & Topi, H. (2009). Modern database management. Pearson Education India.

9. Codd, E. F. (1990). The relational model for database management: version 2. Addison-Wesley Longman Publishing Co., Inc..

10. Loomis, M. E. (1986). The database book. Macmillan Publishing Co., Inc..

11. Clare, C., Cruz, M., Papadopoulou, E., Savage, J., Teperek, M., Wang, Y., ... & Yeomans, J. (2019). Engaging researchers with data management: The cookbook (p. 170). Open Book Publishers.

12. Schmidt, A., Waas, F., Kersten, M., Carey, M. J., Manolescu, I., & Busse, R. (2002, January). XMark: A benchmark for XML data management. In VLDB'02: Proceedings of the 28th International Conference on Very Large Databases (pp. 974-985). Morgan Kaufmann.

13. Huberman, A. M., & Miles, M. B. (1994). Data management and analysis methods.

14. Ramakrishnan, R., Gehrke, J., & Gehrke, J. (2003). Database management systems (Vol. 3). New York: McGraw-Hill.

THIRD SEMESTER

Course Code	LIS-S-605
Course Title	Bibliometrics, Informetrics and Scientometrics
Semester	Third
Course Level	600
Total Marks	50
Course Credit	2 (L+T+P=2+0+0=2) Lecture: 30 Hrs+Tutorial:0 Hrs+ Practical: 0 Hrs
Course Learning Outcomes	After studying this course Bibliometrics, Informetrics and Scientometrics, the students will be able to:
	CLO1: Understand the basic knowledge of bibliometrics CLO2: Acquire the concept of bibliometrics laws and its applications CLO3: Apply various metrices in research evaluation CLO4: Articulate and exemplify the concepts relating to bibliometrics and their applications
Unit	**Description of Course**
Unit I Basics of Metrics	Introduction and need of metric studies in scholarly communication; Evolution of metric studies (From Librametrics to Knowledge geometry); Types of Metrics: Bibliometrics, informetrics, Scientometrics, Webometrics, Altmetrics; Concept, need and types of scientific collaboration; Laws of Bibliometrics: Bradford's law, Zipf's law, Lotka's law; Generalised bibliometrics distributions and fitting of Informetrics Models: Bradford's curve, Leimkuhler's distribution, 80-20 rules; Price's law relating to scientific productivity; Aspects of concentration measures; Circulation statistics.
Unit II Citation Analysis and Citation Indexing	Citation Analysis & Citation Indexing and Bibliometric Indicators: Journal level metrics (Impact Factor; SNIP; SJR); Impact Calculation: h-index, g-index; Citation Databases: Scopus, Web of Science, PubMed, Google Scholar, Author level metrics; Growth and Obsolescence of Literature: Various growth models; the half-life analogy; Determinations of aging factor and half-life; 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

SUGGESTED TEACHING LEARNING STRATEGIES

❖ Lecture-cum discussion & tutorials, library readings, comparative analysis
❖ Literature reviews, discussion, case studies
❖ Demonstration of bibliometric tools
❖ Analysis of documents based on bibliometric indicators

Assessment Framework

Assessment	Written Mode	Oral Mode	Blended Mode
Formative Assessment (25 Marks)	Class Test, Open Book Test, Online Test, Article Writing, Objective Test, Class Assignment, Home Assignment, Annotated Bibliographies, Reports, Models and Bibliometric Analysis Tools	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Role Playing, Quiz, Think-Pair-Share, Seminar	Presentations, Seminars, Field Assignments, Poster Presentations, Tools Demo
Summative Assessment (25 Marks)	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

Note: Teachers have choice of mode of formative assessment based on CLOs

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.

THIRD SEMESTER

Course Code	LIS-E-606
Course Title	Open Access and Scholarly Publishing
Semester	Third
Course Level	600
Total Marks	100
Course Credit	4 (L+T+P=3+1+0=4) Lecture: 45 Hrs+Tutorial:15 Hrs+ Practical: 0 Hrs
Course Learning Outcomes	After studying the Open Access and Scholarly Publishing, the student will be able to:
	CLO1: Acquire basic understanding of Open Access (OA) movements CLO2: Apply different methods of assessing open access contents CLO3: Analyse open access publishing methods and options CLO4: Evaluate OA rights CLO5: Integrate library roles in OA advocacy
Unit	**Description of Course**
Unit I Open Access Movement	Open Access: Meaning, concept; Category of Open Access resources; Finding Open Access contents; Evaluation of OA contents; Open Educational Resources (OER). Open Access v/s Free Resources
Unit II Forms of Open Access Content	Open Archives; Open Repositories: Open data, Open research data; Open Big Data, Open science; Open knowledge; Open protocols and standards.
Unit III Open Access Publishing	Open Access Publishing; Form of Open Access: Gold, Green, Hybrid; Identifying and evaluating OA publishing options; Depositing work in an OA; Promoting research in OA; Publisher's support in OA.
Unit IV Rights in OA	Rights in OA; Embargo; SHERPA / RoMEO; Advocating OA; Copyright and fair use; Authors' rights; Privacy rights; Open access policy related to scholarly material; Library roles in OA advocacy. Electronic Digital Rights (Creative Commons?? Check)

SUGGESTED TEACHING LEARNING STRATEGIES

❖ Lecture-cum discussion & tutorials, library readings, comparative analysis
❖ Literature reviews, discussion, case studies
❖ Demonstration of open access tools and standards

Assessment Framework

Assessment	Written Mode	Oral Mode	Blended Mode
Formative Assessment (50 Marks)	Class Test, Open Book Test, Online Test, Article Writing, Objective Test, Class Assignment, Home Assignment, Annotated Bibliographies, Reports, Models and; Open Access Tools	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Role Playing, Quiz, Think-Pair-Share, Seminar	Presentations, Seminars, Field Assignments, Poster Presentations, Tools Demo
Summative Assessment (50 Marks)	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

Note: Teachers have choice of mode of formative assessment based on CLOs

Suggested Readings

1. Peter, Suber. (2012) Open Access. Cambridge, Mass.: MIT Press. ISBN: 9780262300988.
2. Chudnov, Daniel (1999). Open-source library systems: Getting started. Retrieved June 22, 2004, from www.oss4lib.org/readings/oss4lib-gettingstarted.php
3. Ghosh, S.B. and Anup Kumar Das. "Open Access and Institutional RepositoriesA Developing Country Perspective: A Case Study of India". IFLA Journal 33.4(2007): 229-250.Print.
4. Peter Suber, Open Access Overview: Focusing on open access to peer-reviewed research articles and their preprints, http://www.earlham.edu/~peters/fos/overview.htm (Peter Suber ed.).
5. Rubow, Lexi, et al. (2016). Understanding Open Access: When, Why & How to Make Your Work Openly Accessible. Authors Alliance. doi:10.1353/book.62064.

THIRD SEMESTER

Course Code	LIS-O-607
Course Title	Preservation and Conservation of Library Materials
Semester	Third
Course Level	600
Total Marks	100
Course Credit	4 (L+T+P=3+1+0=4) Lecture: 45 Hrs+Tutorial:15 Hrs+ Practical: 0 Hrs
Course Learning Outcomes	After studying the Preservation and Conservation of Library Materials, the student will be able to:
	CLO1: Acquire the basic concept of preservation and conservation CLO2: Develop the concept of preservation and conservation of the library materials CLO3: Explain the challenges in preservation and conservation of library materials CLO4: Utilize the methods of preservation and conservation of library materials CLO5: Outline the security issues in preservation and conservation
Unit	Description of Course
Unit I Concept of Preservation & Conservation	Concept of preservation and conservation: Concept, Need, advantages and challenges, theory, principles, model; Open Archival Information System (OAIS); Types of Preservation: Physical and digital; Basic preservation management techniques.
Unit II Planning	Preservation Planning: Protective enclosures/measures, selection, review of materials for conservation or replacement; Setting priority for conservation and preservation; Indoor and outdoor security challenges; awareness and staff training.
Unit III Methods	Methods of Preservation: Digitization, formatting, reformatting (copying and imaging) and preservation replacement; Digitization Project (Project Proposal: budgets, personnel, funding, project plan and output, benefits to the institute / organization); National Mission for Manuscripts (NAMAMI); Technological tools for digital preservation.
Unit IV Controlling Deterioration	Control of Deterioration: Physical agents, chemical agents, biological agents; Environmental control; Control of micro-biological agents; Rehabilitation of documents, repair and restoration (binding).

SUGGESTED TEACHING LEARNING STRATEGIES

- ❖ Lecture-cum discussion & tutorials, library readings, comparative analysis
- ❖ Literature reviews, discussion, case studies
- ❖ Demonstration of digital preservation tools
- ❖ Review of different deterioration control measures

Assessment Framework

Assessment	Written Mode	Oral Mode	Blended Mode
Formative Assessment (50 Marks)	Class Test, Open Book Test, Online Test, Article Writing, Objective Test, Class Assignment, Home Assignment, Annotated Bibliographies, Reports, Digital Preservation Tools	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Role Playing, Quiz, Think-Pair-Share, Seminar	Presentations, Seminars, Field Assignments, Poster Presentations
Summative Assessment (50 Marks)	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

Note: Teachers have choice of mode of formative assessment based on CLOs

Suggested Readings

1. Alire, C. (2000). Library disaster planning and recovery handbook. New York: NeanSchuman.
2. Baird, B. J. (2018). Practical Preservation and Conservation Strategies for Libraries. United States: Rowman & Littlefield Publishers.
3. Balasubramanian, P. (2021). Preservation and Conservation of Library Resources. India: EssEss Publications.
4. Balloffet, N., Hille, J., & Reed, J. A. (2005). Preservation and conservation for libraries and archives. Chicago: American Library Association.
5. Brown, Adrian. (2017). Practical digital preservation: A how-to guide for organizations of any size. S.l.: Facet Publishing
6. Corrado, E. M., Moulaison Sandy, H. (2017). Digital Preservation for Libraries, Archives, and Museums. United States: Rowman & Littlefield Publishers.
7. Deegan, M., & Tanner, S. (2013). Digital preservation. London: Facet Publishing
8. Kahn, M. (2004). Protecting Your Library's Digital Sources: The Essential Guide to Planning and Preservation. American Library Association.
9. Mahapatra, P. K. & Chakrabarti, B. (2002). Preservation in Libraries perspectives principles and practice. Delhi: EssEss.
10. Millar, L. (2017). Archives: Principles and practices. London: Facet Publishing
11. Myntti, J and Zoom, J Digital Preservation in Libraries: Preparing for a Sustainable Future. (2018). United States: American Library Association.
12. Varlamoff, M., Kremp, V. (1998). IFLA Principles for the Care and Handling of Library Material. Netherlands: International Federation of Library Associations and Institutions, Core Programme on Preservation and Conservation.
13. Williams, C. (2006). Managing archives: Foundations, principles and practice. Oxford: Chandos Publishing
14. Casey, J. P. (1982). Paper making. New York : Interscience Publishers
15. Corduroy, John. (1978). Book binding for beginners. London : Thomas and Hudson
16. Dasgupta, Kalpana, ed. (1988). Conservation of library materials. Calcutta : National Library
17. Durean, J. M. & Clements, D. W. G. (1986). Principles of the preservation of library materials. Hague : IFLA
18. Gabriel, M. & Ladd, D. (1980).The microfilm revolution in libraries. Greenwich : JAI Press

19. Harvey, Poss. (1993). Preservation in libraries: a reader. London : R R Bowker
20. Hans, K. J. (1958). Sign, symbol and script. London : George Allen &Unwin
21. Sharma, R. G. (1979). Pandulipisampadankala. Delhi :Prabhat Prakashan
22. Singh, R. S. (1993). Conservation of documents in libraries, archives and museums. Delhi

FOURTH SEMESTER

Course Code	LIS-C-651
Course Title	Knowledge Management and Information Systems
Semester	Fourth
Course Level	600
Total Marks	100
Course Credit	4 (L+T+P=3+1+0=4) Lecture: 45 Hrs+Tutorial:15 Hrs+ Practical: 0 Hrs
Course Learning Outcomes	After studying this Knowledge Management and Information Systems course, the students will be able to:
	CLO1: Articulate and exemplify basic concept of knowledge management (KM) system CLO2: Explain library and information centres as KM system CLO3: Discover the role of various KM system CLO4: Investigate various KM system at national and international level CLO5: Analyse the role of librarian and knowledge manager
Unit	**Description of Course**
Unit I Basics of Knowledge Management	Knowledge: Concept and types; Knowledge Management: Concept, scope, definition, types, role, principles, tools, components and architecture; Knowledge creation and knowledge architecture; Nonaka and Takeuchi SECI model.
Unit II KM Tools	Tools of Knowledge Management: Technology tools - Mind mapping, organizational memory, MIS, software for KM; Non-technology tools - Community of practice, brain storming, lesson learned, knowledge audit, story telling.
Unit III Information System	KM Systems; 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; National and International Information Systems: NIScPR, ENVIS, INIS, INSPEC, ERIC, Patent Information System, Biotechnology Information System (BIS), Agriculture Research Information System.
Unit IV Libraries and KM	Capturing tacit knowledge methods; Knowledge Codification: Tools and procedures; Knowledge testing; Knowledge transfer and sharing; Information Management Vs Knowledge Management; Role of librarian in KM.

SUGGESTED TEACHING LEARNING STRATEGIES

- ❖ Lecture-cum discussion & tutorials, library readings, comparative analysis
- ❖ Literature reviews, discussion, case studies
- ❖ Study of KM tools and best practices
- ❖ Review of models and frameworks

Assessment Framework

Assessment	Written Mode	Oral Mode	Blended Mode
Formative Assessment (50 Marks)	Class Test, Open Book Test, Online Test, Article Writing, Objective Test, Class Assignment, Home Assignment, Annotated Bibliographies, Reports, Models and Framework Reviews	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Role Playing, Quiz, Think-Pair-Share, Seminar	Presentations, Seminars, Field Assignments, Poster Presentations
Summative Assessment (50 Marks)	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

Note: Teachers have a choice of mode of formative assessment based on CLOs

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 Code	LIS-C-652
Course Title	Electronic Resource Management
Semester	Fourth
Course Level	600
Total Marks	100
Course Credit	4 (L+T+P=3+1+0=4) Lecture: 45 Hrs+Tutorial:15 Hrs+ Practical: 0 Hrs
Course Learning Outcomes	After studying the Electronic Resource Management course, the student will be able to:
	CLO1: Acquire the concept of electronic resources CLO2: Discuss the methods of collection development of electronic resources CLO3: Design methods of managing electronic resources CLO4: Demonstrate the methods of access management of electronic resources CLO5: Assess the impact and effectiveness of electronic resources management
Unit	Description of Course
Unit I Overview of ERM	Electronic Resource Management (ERM): Introduction; Types of electronic resources; Emergence and entrenchment of electronic resources in libraries.
Unit II Acquisition & Maintenance	Electronic Resources: Acquisition, maintenance and renewal; Deselecting electronic resources; Consortia at national and international level: E-ShodhSindhu, IIMs, CSIR; Overview of Consortia at International Level
Unit III Access Management	Access Management: Linking, parsing, and access; Generating title lists; Linking and discovery tools; Delivering; Branding; Marketing; User training; Digital Rights Management (DRM); Preservation of Electronic Resources: LOCKS, CLOCKS.
Unit IV Usage Control	Usage Control and Maintenance: Administrative Interfaces; Authentication; Proxy Servers; Remote login; Electronic Resources Usage: COUNTER and SUSHI; Observation logs; Copyright; Fair use.

SUGGESTED TEACHING LEARNING STRATEGIES

❖ Lecture-cum discussion & tutorials, library readings, comparative analysis
❖ Literature reviews, discussion, case studies
❖ Demonstration of ERM tools
❖ Review of policies and practices

Assessment Framework

Assessment	Written Mode	Oral Mode	Blended Mode
Formative Assessment (50 Marks)	Class Test, Open Book Test, Online Test, Article Writing, Objective Test, Class Assignment, Home Assignment, Annotated Bibliographies, Reports	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Role Playing, Quiz, Think-Pair-Share, Seminar	Presentations, Seminars, Field Assignments, Poster Presentations; DEMO
Summative Assessment (50 Marks)	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

Note: Teachers have choice of mode of formative assessment based on CLOs

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–
4. Fowler, D. "Licensing: An Historical Perspective." Journal of Library Administration 42, no. 3/4 (2005): 177–97
5. Yu, H., &Breivold, S. (2008). Electronic resource management in libraries: Research and practice. Hershey: Information Science Reference

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

FOURTH SEMESTER

Course Code	LIS-R-653
Course Title	Dissertation
Semester	Fourth
Course Level	600
Total Marks	200
Course Credit	8 (L+T+P=8+0+0=8) Lecture: 120 Hrs+Tutorial:0 Hrs+ Practical: 0 Hrs
Course Learning Outcomes	After writing the dissertation, the student will be able to:
	CLO1: Identify and formulate research problems CLO2: Write a good research proposal CLO3: Identify and use appropriate research methodology CLO4: Apply appropriate tools in a scientific investigation CLO5: Analyse collected data systematically CLO6: Prepare a report of research
	Detailed Activities
	1. The student has to take a topic in any area of library and information science in third semester 2. Conduct a literature survey 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 dissertation as per the standard guidelines of the thesis and dissertation preparation 7. The department will assign the supervisor
	Evaluation
	The evaluation of the dissertation shall be done by External Members, appointed by the department that include evaluation of the dissertation and viva.
	Marking

	Distribution of Marks (Total 8 credits)
	    a. Dissertation submitted by Students = 150 Marks (externally evaluated by experts)
	    b. Internal Assessment (Research Proposal) = 25 Marks
	    c. Viva = 25 Marks (Conducted by External Examiner)

FOURTH SEMESTER

Course Code	LIS-P-654
Course Title	Experiential Learning
Semester	Fourth
Course Level	600
Total Marks	50
Course Credit	2 (L+T+P=0+0+2=2) Lecture: 0 Hrs+Tutorial:0 Hrs+ Practical: 40 Hrs
Course Learning Outcomes	❖ After going through a continuous Experiential Learning Program, the students will be able to:
	CLO1: Apply their knowledge in handling day-to-day activities of the library CLO2: Learn practical knowledge of managing day-to-day activities by practising CLO3: Analyse problems and seek solutions in day-to-day activities
	Activities of Experiential Learning
	❖ There will be continuous hands-on training 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 guideline, standard operating procedures to the students about the various activities to be taken in internship ❖ The students will be provided a job diary and they have to prepare a report under the supervision of librarian/faculty ❖ There might be presentations, discussion, charts, etc to adjudge the learning outcome of the internship ❖ Experiential Learning shall run all the semester except fourth Semester ❖ Student will be given a Successful Completion of Experiential Learning reflected in Third Semester Marksheet as "Successful/Unsuccessful" ❖ The preferred place of experiential learnings shall be Central Library, Sikkim University

SUGGESTED TEACHING LEARNING STRATEGIES

❖ Experiential learning of theoretical components of the curriculum in the library

Assessment Framework

Assessment	Written Mode	Oral Mode	Blended Mode
Formative Assessment (NC)	**Report File to be prepared by the student. The faculty shall provide an assignment and student shall perform activities and submit a report**	Oral Test, Viva-Voce	Presentations, Seminars, Poster Presentations
	The Assessment Method shall be formative and evaluated Internally. Faculty may also choose other form of formative assessment		

Suggested Readings

Amy York (2010), Enriching the Academic Experience: The Library and Experiential LearningLearning, Available at https://digitalcommons.du.edu/cgi/viewcontent.cgi?article=1233&context=collaborativelibrarianship

Experiential Learning Services Librarian. Available at https://www.lib.uchicago.edu/about/thelibrary/employment/staff-opportunities/Experiential-LS-Librarian/

Sarah Nagle, Innovation and Experiential Learning in Academic Libraries Meeting the Needs of Today's Students, Rowman & Littlefield Publishers

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York, A., Groves, C., & Black, W. (2010). Enriching the academic experience: The library and experiential learning. Collaborative Librarianship, 2(4), 193–203. https://doi.org/10.29087/2010.2.4.07

FOURTH SEMESTER

Course Code	LIS-O-655
Course Title	Intellectual Property Rights
Semester	Fourth
Course Level	600
Total Marks	100
Course Credit	**4 (L+T+P=3+1+0=4)** **Lecture: 45 Hrs+Tutorial:15 Hrs+ Practical: 0 Hrs**
Course Outcomes	Upon successful completion of the Intellectual Property Rights course, the students will be able to:
	CLO1: Identify different forms of Intellectual Properties (IPs), the right of ownership, the scope of protection as well as the ways to create and to extract value from IP CLO2: Analyze Patent, Copyright, Trademark, Industrial design, GI, Plant varieties and Trade Secret CLO3: Illustrate the criteria for filling a patent as IPR CLO4: Demonstrate IPR Infringement CLO: Learn the legal provisions of IPR Protections and role of libraries
Unit	Description of Course
Unit I **Background of IPR**	Intellectual Property Right (IPR): Meaning, origin, nature; Kinds of IPR: Copyright, Patent, Trade Mark, Trade Secret and **Trade Dress**, Design, Layout Design, Geographical Indication (GI); Plant Varieties and Traditional Knowledge; Introduction to WIPO; TRIPS.
Unit II **Patents and Copyright**	Patent: Origin, meaning, types; Non-patentable inventions; Registration procedure; Rights and duties of patentee; Assignment and licence; Restoration of lapsed Patents; Surrender and revocation of Patents; Infringement, remedies and penalties; Copyright: Origin, definition, types, registration, procedure, assignment and licence, terms, piracy, infringement, remedies; Copyright with special reference to software.
Unit III **Trade Marks and Design**	Trade Marks: Origin, meaning, nature, types, registration, infringement and remedies, offences, passing off, penalties; Domain Names on cyber space; Design: Meaning, definition, objectives, registration, cancellation of registration, international convention, functions; Semiconductor Integrated Circuits Layout-Design Act, 2000.
Unit IV **Role of Library**	Geographical Indications: Meaning, purpose and use; The Geographical Indications of Goods (Registration and Protection) Act, 1999; Plant Varieties; Traditional Knowledge; Role of Library and Information Centres in IPR protection; Job prospects associated with IPRs.

SUGGESTED TEACHING LEARNING STRATEGIES

- ❖ Lecture-cum discussion & tutorials, library readings, comparative analysis
- ❖ Literature reviews, discussion, case studies
- ❖ Review of IPR laws, comparison

Assessment Framework

Assessment	Written Mode	Oral Mode	Blended Mode
Formative Assessment (50 Marks)	Class Test, Open Book Test, Online Test, Article Writing, Objective Test, Class Assignment, Home Assignment, Annotated Bibliographies, Reports, Review of IPR Laws	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Role Playing, Quiz, Think-Pair-Share, Seminar,	Presentations, Seminars, Field Assignments, Poster Presentations; DEMO
Summative Assessment (50 Marks)	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

Note:
1. The department shall announce the status of course at the start of semester subject to availability of course online /offline
2. Teachers have choice of mode of formative assessment based on CLOs

Suggested Readings

1. Intellectual Property Rights and the Law, Gogia Law Agency, by Dr. G.B. Reddy
2. Law relating to Intellectual Property, Universal Law Publishing Co, by Dr. B.L.Wadehra
3. Narayanan P, Intellectual Property Law (3rd edn, Eastern Law House 2017)
4. Dr.S.R. Myneni, Law of Intellectual Property, Asian Law House,
5. Cornish W, Llewelyn D and Aplin T, Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights (8th edn, Sweet & Maxwell 2013)
6. Reddy G B, Copyright Law in India (Gogia Law Agency 2018)
7. Pearson H E and Miller C G, Commercial Exploitation of Intellectual Property (Blackstone Press 2017)
8. Pathak, Manju An introduction to intellectual property rights/ Manju Pathak
9. N.S, Rathore, Intellectual Property Rights: Drafting, Interpretation Of Patent Specification: New Delhi: NIPA, 2013
10. Singh, Phundan, IPR & Plant breeder`s rights at a glance: New Delhi: New Vishal pub., 2012

FOURTH SEMESTER

Course Code	LIS-E-656
Course Title	Library Entrepreneurship
Semester	Fourth
Course Level	600
Total Marks	100
Course Credit	4 (L+T+P=3+1+0=4) Lecture: 45 Hrs+Tutorial:15 Hrs+ Practical: 0 Hrs
Course Learning Outcomes	After studying the Library Entrepreneurship, the student will be able to:
	CLO1: Acquire the Concept of Entrepreneurship CLO2: Interpret the role of the library as an asset for entrepreneurship CLO3: Assess the effectiveness of library resources and services for entrepreneurial activities CLO4: Plan EDPs for developing entrepreneurial skills CLO5: Produce next gen library entrepreneurs
Unit	**Description of Course**
Unit I **Concept of Entrepreneurship**	Fundamentals of Entrepreneurship: Meaning, definitions of entrepreneur, entrepreneurship and entrepreneurship development and librarianship; Evolution of entrepreneurship in India; Role of entrepreneurship in Indian economy; Factors influencing entrepreneurship development; Problems in entrepreneurship development in LIS field in India.
Unit II **Entrepreneurship Theories**	Theories of Entrepreneurship; Entrepreneurial characteristics, competencies, motivation, mobility; Concept of intrapreneur; Difference between entrepreneur and intrapreneur; Difference between entrepreneur and manager; Innovation and creativity
Unit III **Capacity Building for Entrepreneurship**	Capacity Building Skills Needed for Entrepreneurship & Infopreneurship; Entrepreneurship Development Programmes (EDPs): Meaning, need, and objectives; EDPs in India: Historical Perspective; Phases of EDPs; Evaluation of EDPs; Problems of EDPs; Employment creation; Types of marketing strategies for business growth; Start Up: Definition of small enterprise, rationale behind developing small enterprises, ownership forms, project identification and selection; Preparation of business plan / project, project appraisal.
Unit IV **Librarian and Entrepreneurs**	Evolving nature of the LIS profession; Library entrepreneurship; Image of librarian for entrepreneurship; Building library professionals for entrepreneurship; Practicum for best practices in entrepreneurship; Cases of entrepreneurial scope in library and information services and activities; Entrepreneurial skills for the librarian.

SUGGESTED TEACHING LEARNING STRATEGIES

❖ Lecture-cum discussion & tutorials, library readings, comparative analysis
❖ Literature reviews, discussion

❖ Case studies-specific analysis
❖ Writing business plans

Assessment Framework

Assessment	Written Mode	Oral Mode	Blended Mode
Formative Assessment (50 Marks)	Class Test, Open Book Test, Online Test, Article Writing, Objective Test, Class Assignment, Home Assignment, Annotated Bibliographies, Reports, Conceptual Models	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Role Playing, Quiz, Think-Pair-Share, Seminar,	Presentations, Seminars, Field Assignments, Poster Presentations, Business Plans; Idea Pitching
Summative Assessment (50 Marks)	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

Note: Teachers have choice of mode of formative assessment based on CLOs

Suggested Readings

1. Marc Dollinger: Entrepreneurship: Strategies and Resources, Pearson Education, Noida, 2016
2. Robert D. Hishrich and Michael P. Peters: Entrepreneurship, Tata McGraw-Hill Publishing , 2009
3. D. F. Kuratko and T. V. Rao: Entrepreneurship: A South-Asian Perspective, Cengage Learning, Delhi, 2016
4. Thomas W. Zimmerer and Norman M. Scarborough: Essentials of Entrepreneurship and Small Business Management, PHI Learning, Delhi, 2015
5. Rajeev Roy: Entrepreneurship, Oxford University Press, New Delhi, 2011
6. S. S. Khanka: Entrepreneurial Development, S. Chand & Company Pvt. Ltd., New Delhi, 2016
7. Diandra, D. & Azmy, A. (2020). Understanding Definition of Entrepreneurship" International journal of Management, Accounting and Economics7(5) 2383-2126 www.ijmae.com
8. Hisrich, R. D. (1992). Toward an Organization Model for Entrepreneurial Education Proceeding of International Entrepreneurship 1992 Conference. Dortmund, Germany p.29
9. Knight, F. (1921). Risk, uncertainty and profit. Boston, MA: Houghton Mifflin
10. Kobia, M. & Sikalieh, D. (2010). Towards a search for the meaning of entrepreneurship. Journal of European Industrial Training 34(2) 116-120
11. Najim, M. (2020). Top five Takeaways on the importance of entrepreneurship. Sanford Centre for International Development
12. Chaubey, A K. & Lal, M. (2016) Marketing of Library and Information Science Products and Services in Present Scenario Transformation of Library Services in Electronic Era Studera Press.
13. Mary Beth Lock (Editor), Mary G. Scanlon (Editor), Mary Krautter (Editor), (2012), The Entrepreneurial Librarian: Essays on the Infusion of Private-Business Dynamism into Professional Service

14. Crumpton, M.A. and Bird, N.J. (2019), "Educating the Entrepreneurial Librarian", Supporting Entrepreneurship and Innovation (Advances in Library Administration and Organization, Vol. 40), Emerald Publishing Limited, Bingley, pp. 169-182. https://doi.org/10.1108/S0732-067120190000040011

15. Crowe, K., et al. (2019), "The Status of Entrepreneurship in Libraries: Content Analysis and Assessment from the Conference for Entrepreneurial Librarians", Supporting Entrepreneurship and Innovation, Emerald Publishing Limited, Bingley, pp. 115-132. https://doi.org/10.1108/S0732-067120190000040007

FOURTH SEMESTER

Course Code	LIS-E-657
Course Title	Research Data Management
Semester	Fourth
Course Level	600
Total Marks	100
Course Credit	4 (L+T+P=3+1+0=4) Lecture: 45 Hrs+Tutorial:15 Hrs+ Practical: 0 Hrs
Course Learning Outcomes	After studying the Research Data Management course, the student will be able to:
	CLO1: Acquire the concept of research data CLO2: Illustrate the methods of data description CLO3: Outline the Concept of research data management CLO4: Articulate the research data management plans in RDM CLO5: Integrate RDM into practice, maintaining the quality of research data and effective integration practices
Unit	**Description of Course**
Unit I Concept of RDM	Research Data Management (RDM); Data Management Cycle; Data Management Plan (DMP); Government data; RDM Steps; Data curation and its workflow;
Unit II Publishing and Licensing	Publishing data; Open Data Publishing; Data repositories; Licenses related to data; Linked Open Data; RDM Tools: Analyzing, visualizing, bibliographic. Licensing Models
Unit II RDM Practices	Research Data and Content Literacy; Steps of Data and Information Literacy (Research Data Skills): Identify, classify, organize, provide;' Models; Data management competences; Practice: Bad Data,
Unit IV Software tool for RDM	Software for Cleaning Messy Data: OpenRefine, Extract Transform Load (ETL) software - Talend; Software for Data Repositories: CKAN, Dataverse; Research Data Repository: Figshare, Zonedo.

SUGGESTED TEACHING LEARNING STRATEGIES

❖ Lecture-cum discussion & tutorials, library readings, comparative analysis
❖ Literature reviews, discussion
❖ Case studies
❖ Demonstration of RDM tools

Assessment Framework

Assessment	Written Mode	Oral Mode	Blended Mode
Formative Assessment (25 Marks)	Class Test, Open Book Test, Online Test, Article Writing, Objective Test, Class Assignment, Home Assignment, Reports	Oral Test, Viva-Voce, Group Discussion, Fish Bowl Technique, Role Playing, Quiz, Think-Pair-Share, Seminar	Presentations, Seminars, Field Assignments, Poster Presentations, DEMO
Summative Assessment (25 Marks)	Semester-end examinations conducted by the university will be considered the mode of summative assessment.		

Note: Teachers have choice of mode of formative assessment based on CLOs

Suggested Readings

1. Gils, B. V. (2020). *Data management: A gentle introduction*. [S.l.]: Van Haren Publishing.
2. Han, J. and Kamber, M. (2011). *Data mining: Concepts and techniques* (3rd ed.). Waltham MA: Morgan Kaufmann.
3. Marco, D. (2000). *Building and managing the meta data repository: A full lifecycle guide*. New York: John Wiley and Sons.
4. Oliver, G. and Harvey, R. (2016). *Digital curation*. London: Facet Publishing.
5. 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.
6. Herzog, D. (2016). Data literacy: A user's guide. SAGE Publications.
7. Jones, B. (2020). Data Literacy Fundamentals: Understanding the Power & Value of Data (The Data Literacy Series). Data Literacy Press.
8. Some Specific Literature on RDM*