

REVISED GUIDELINES, REGULATIONS, AND SYLLABI

2018-19

M. Lib. I. Sc.
(Master of Library and Information Science)
2-Year Integrated Programme
[Equivalent to BLIS (One Year) + MLIS (One Year)]



**DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE
PONDICHERY UNIVERSITY
PUDUCHERRY – 605 014**

1. PONDICHERRY UNIVERSITY

Pondicherry University is a Central University established by an Act of Parliament in October 1985. It is an affiliating University with a jurisdiction spread over the Union Territory of Puducherry, Lakshwadeep and Andaman and Nicobar Islands. The University has been reaccredited with 'A' Grade by NAAC with regard to the students' friendly learning environment, good infrastructure, modern amenities, excellent teaching and the supportive non-teaching fraternity. The University has three campuses. The main campus is located at Puducherry with 800 acres of lush-green Wi-fi enabled area, housing 15 Schools, 37 Departments, 10 Centres and 2 Chairs, offering over 144 PG & Research programmes. Other two smaller campuses are located at Port Blair and Karaikal (about 150 kms. from Puducherry).

The University has a sprawling scenic and serene campus with an inspiring, peaceful and congenial environment. The Campus Life is extremely congenial and entirely self-contained with a Shopping Complex, Health Centre, Bank, Post Office, Gymnasiums, Sports facilities, etc. The University has 92 affiliated colleges, offering Under Graduate and Post Graduate courses in the Faculty of Arts, Science, Commerce, Engineering Technology, Fine Arts, Law, Management and Medicine.

The Pondicherry University is the first University in the country to start a Community College to cater to the needs and demands of the local community to enhance skill development and their employability. The College offers several job oriented courses including paramedical courses with hands on training by expert medical team at hospitals. Selected students of Community College have been awarded financial support by U.S. Government to get training at Community Colleges in U.S. for one year. The University has another Community College at Mahe, started in the academic year 2014-15 for the benefit of the local population of that region. The University runs 26 Diploma / Certificate Add-On Courses in the evenings so that regular students and outside members can attend these courses to acquire additional knowledge and skill that would enhance their job prospects.

The University has 24 hostels (16 for Boys, 7 for Girls and 1 for Foreign Students), State-of-the-Art Laboratories, Free transport, on-and-off campus and excellent sports facilities. It offers rent-free accommodation to all girl students, provides totally-free education to all the differently-abled students. The Wi-fi enabled campus has 100% power back-up to all the Departments and Hostels of the University. With multi-faceted growth on several fronts and academic expansion in terms of new disciplines and projects, the University is moving fast towards its goal of excellence and is the desired destination of youth from all over the country for higher education.

2. DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE

The Department of Library and Information Science was started during the academic year 2007-08. The Department offers a professional Master's Degree programme (MLIS) and a Ph.D. Degree Programme in Library and Information Science. In addition, an Add-on Course namely Postgraduate Diploma in Library Automation and Networking (PGDLAN) is also offered in the evenings. MLIS course duration is of two (2) years and comprises four (4) semesters.

2.1 INFRASTRUCTURE FACILITIES

The physical and academic infrastructure comprises well equipped class rooms with LCD Projectors and Public Address System, Computer Lab with Internet facility and required hardware and software for teaching-learning, Wi-Fi facility in campus, access to e-books, e-journals and institutional repositories, subscription to national and international journals and magazines, latest books on library and information science, separate hostels on campus for girls and boys, etc. The Department also organizes several events like study tour, workshops, Seminars, guest lectures by eminent academics from India and abroad.

2.2 PLACEMENT OPPORTUNITIES

M.Lib.I.Sc. programme is a professional degree. There is a great demand for the library professionals in the job market. M.Lib.I.Sc. postgraduates get placed as Librarians, Information Scientists, Knowledge Managers, Cataloguers, Indexers, Information Analysts, Reference Services Specialists, Technical Editors, Consultants, etc. in traditional libraries & information centres and corporate sectors also. Those who qualify UGC-NET or SLET examination can enter academics as an Assistant Professor or Assistant Librarian of a University or Librarian of a College. Those who qualify UGC-JRF can pursue research in the field of Library & Information Science with UGC fellowship. An added qualification of PGDLAN would place the student at a higher advantage in the job arena with knowledge of automation and networking. Our recruiters include LIS Schools, all kinds of libraries and information centres, colleges, universities and corporate companies like Tata Consultancy Services, Indian School of Business etc.

2.3 FACULTY PROFILE

Head of the Department : Dr. R. Sevukan

Sl. No.	Name of the Faculty	Designation	Educational Qualification	Areas of Specialization
1.	Dr. Chennupati K. Ramaiah	Professor	M.Sc., MLISc., Dip. in Hindi, Ph.D.	ICT applications in Library & Information Services, Multimedia, Hypertext, E-Learning, User Interfaces, Human Computer Interaction, Web / E-Publishing, & Archival Informatics, Healthcare Information, School Libraries
2.	Dr. R. Sevukan	Associate Professor & Head	M.Com., M.L.I.S., M.Phil., PGDDE, Ph.D.	Library Automation, Scientometrics, Academic, Library System, Research Methods, Information Seeking, Behaviour, ICT Applications in Libraries
3.	Dr. Rekha Rani Varghese	Assistant Professor (SS)	B.Sc., MLIS, Ph.D.	IT applications in Libraries, Institutional Repositories, Information Retrieval, User Studies
4.	Dr. Mangkhollen Singson	Assistant Professor (SS)	B.Sc., MLIS, Ph.D.	Marketing of Information Products, Knowledge Management, E-journals
5.	Mr. M. Leeladharan	Assistant Professor (SS)	M.Sc, M.Phil.	Information Retrieval, Scientometrics, Knowledge Organization

3. M.Lib.I.Sc. REGULATIONS (Revised), 2018 – 2019

3.1 Programme Details

Name of the Department : Department of Library and Information Science
School : School of Media and Communication
Subject : Library and Information Science
Name of the Programme : M.Lib.I.Sc. (Master of Library and Information Science)
Duration of the Programme : 2 Years – divided into 4 Semesters (Choice Based Credit System)

3.2 Objectives of the Programme

1. To impart high level skills and training necessary for those aspiring to hold higher positions in library and information centres within the country and abroad
2. To prepare the library and information professionals for the changing scenario
3. To get the learners familiarized with the basic concepts of information and its communication in society;
4. To teach information processing techniques and develop capability in retrieving information efficiently by applying different search techniques;
5. To get the students acquainted with the activities and services of different information systems and introduce them to packaging and consolidation techniques;
6. To introduce different methods and techniques of research;
7. To sensitize the learners and enable them to resolve the major issues associated with the development of new technology in the libraries and information centres;
8. To impart ICT based skills using open source software in order to make them serve competently in an automated and networked environment; and
9. To introduce modern tools and techniques to students to manage Libraries and Information Centres effectively.

3.3 Eligibility for Admission to the Programme

a) Qualification Criteria for Admission

Candidates who have passed any Bachelor's Degree examination from a recognized university under 10+2+3 system and who have secured at least 50% marks in aggregate in Part III (main subjects) are eligible to apply for admission to the M.Lib.I.Sc (Library and Information Science) Programme. In case of candidates belonging to SC/ST category, relaxation in the percentage of marks shall be given as per the University Guidelines issued from time to time.

b) Entrance Examination

Candidates seeking admission to the programme shall be required to appear for a 2-hour written examination conducted by the University during the last week of May or first week of June or on the date announced by the University. The written examination shall consist of 100 objective type questions to test mental ability, aptitude and general knowledge of the candidate consisting of questions from current topics of general interest, books, authors, libraries, information resources, reading habits and other related areas.

c) Selection for Admission

The selection of candidates shall be made on the basis of the marks scored in the entrance examination.

3.4 Intake

The total number of Candidates to be admitted to the programme would be 35 (Thirty five) only.

3.5 Admission

All admissions shall be made provisionally and any candidate found, on scrutiny, to be ineligible shall be asked to leave the course. Normally all admission process shall be over before the first Monday of July when the classes will commence or as per the schedule announced by the university from time to time.

3.6 Internship

Each student shall take up internship during Summer Vacation between Second and Third Semesters for a period of one month in reputed libraries, archives and museums in the country.

3.7 Submission of Dissertation

- i. M.Lib.I.Sc. (Master of Library and Information Science) students shall have to choose a topic for dissertation in the beginning of the 4th Semester and preliminary preparation be carried out under the guidance of a teacher.
- ii. They have to submit the Dissertation on the selected topic, as per (a) above, within the deadline as prescribed by the Department of Library and Information Science.
- iii. Candidates keeping terms but not appearing for the Theory and Practical Examinations and not submitted the Dissertation within the prescribed time may appear for respective examinations as Ex-students/Repeaters in subsequent Semester examinations and submit the Dissertation within the prescribed time limit adhering to the detailed dissertation guidelines as provided by the department.

- iv. Candidates appearing for the examination under the provision of (c) above will not be eligible for the award of any rank, prize, medal, etc.

3.8 Programme Matrix

The Programme matrix of the M.Lib.I.Sc. course during the academic year/s shall be as follows:

Semester	No. of Courses to be Undertaken			
	Theory Examination	Project Dissertation / Internship	Practical Examination	Total
First	4	-	1	5
Second	4	-	2	6
Third	5	1	1	7
Fourth	3	1	-	4
Total	16	2	4	22

3.9 Scheme of Instruction

The scheme of instruction covers theory papers, practical, dissertation work and library internship.

3.10 Medium of Instruction

The medium of instruction is English only.

3.11 Minimum Requirement of Class Attendance

The student shall be considered to have completed the programme if he/she has attended not less than 70% of the number of working periods (Lectures, Seminars, Practicals and Dissertation Guidance taken together) in each Semester.

4. EVALUATION PATTERN

4.1 Breakup of Internal/ External End Semester Exams:

- a) M.Lib.I.Sc. programme shall carry an Internal Assessment component to the extent of 40 marks and End Semester for 60 marks.
- b) A student shall not be permitted to repeat any course only for the purpose of improving the grade.

4.1.1 Internal Assessments

A schedule of Internal Assessment tests shall be prepared at the very beginning of the semester. Written tests for each subject will be conducted by the teacher concerned during September / October (Odd semesters) and February / March (Even Semesters). Internal Assessment marks shall be displayed within a week from the date of conduct of examination and all corrected answer papers shall be given back to students with comments, if any. It is mandatory for all students to participate in all the Internal Assessment tests and in various course-work related activities for the award of the above marks. The marks obtained in the Internal Assessment in the first attempt shall be carried over to the examination in the subsequent attempts.

4.1.2 Break up of Internal Assessment (I.A.) Marks

Each teacher shall organize a continuous assessment of each of the courses assigned to him/her. The internal assessment marks shall be given as per the following breakup:

Internal Assessment Tests (minimum two)	2 x 15 = 30
Seminars/ Assignments/ Case Demos/ Presentations/ Write ups/ Viva, etc.	1 x 10 = 10
Internal Total	40

4.1.3 Question Paper Pattern of I.A. (M.Lib.I.Sc.)

Time: 1½ Hours

Max. Marks: 30
(Weightage: 15 Marks)

Section	Pattern*	No. of Marks	Remarks
A – MCQ	Answer ALL the questions	5 x 1 = 5	Coverage shall be from two units at least
B – Short Note	Answer ANY THREE questions in about 300 words each	3 x 5 = 15	
C – Essay Type	Answer ANY ONE question (either/or choice) in about 600 words	1 x 10 = 10	

**Question paper pattern for practical courses may vary*

4.2 End- Semester Examinations

- An End Semester examination shall be conducted for M.Lib.I.Sc. in the department. The duration of the end semester examination shall be for 3 hours.

- b) A schedule of End Semester examinations be prepared and displayed by the department at least one- month ahead of the conduct of the examination.
- c) A student shall apply for all the papers of a semester when he / she appears for the examination of that semester for the first time.
- d) No student **who has secured less than 70% of attendance** in any course shall be permitted to attend the end-semester examination and he shall be given grade of FA- failure due to lack of attendance. He shall be asked to repeat that course the next time it is offered.

4.2.1 Question Paper Pattern of End Semester Examinations (M.Lib.I.Sc.)

Time: 3 Hours

Max. Marks: 60

Section	Pattern	No. of Marks	Remarks
A – MCQ	Answer ALL the questions	10 x 1 = 10	Coverage shall be distributed from all the units equally
B – Short Note	Answer ANY FIVE questions in about 250 words each	5 x 4 = 20	
C – Essay Type	Answer ALL the questions (either/or choice) in about 800 words each	2 x 15 = 30	

4.3 Board of Examiners and Evaluation

- a) A Panel of External examiners shall be submitted by each course teacher concerned to the Head of the Department by the 6th week of the Semester. Head of the Department shall coordinate the question paper setting work / conduct of exams/ consolidation of marks and Grades and provisionally publish the Results with the approval of Dean of the School.
- b) The answer papers of end-semester examinations should be evaluated by the Internal Examiner immediately after the completion of exam and the Award sheet should be submitted to HOD in a sealed cover before the same papers are kept for second valuation by External Examiner.
- c) In case of difference of more than 15% of marks the answers paper shall be revalued by the Examination Committee and marks awarded by this committee shall be taken as final.
- d) Practical exams shall be conducted involving External Examiners.

4.4 Consolidation of Marks

Programme Committee consisting of Vice-Chancellor's nominee and External Examiners shall take up the consolidation of Internal Assessment marks and End- Semester marks (average of both Internal and External Evaluation) and prepare a consolidated Marks Statement.

In order to declare the pass, a Student should get:

- a) A minimum of 40% marks in end-semester exam, and
- b) A minimum of 50% marks in aggregate when Internal Assessment and End- Semester marks are added.

4.5 Evaluation of Internship/Dissertation

4.5.1 Internship

The interns are expected to undergo a library internship for one (1) month in reputed libraries. They will submit a detailed report and present a seminar in the department for the evaluation. At the workplace, the interns will be evaluated by the trainer for 60 marks based on the following parameters: Punctuality; Attendance; Reliability; Adaptability; Interpersonal Skills; and Overall Performance during the period of internship.

Total Marks for Internship	:	100 Marks
Report	:	30 Marks (Internship Coordinator/HOD)
Seminar Presentation	:	10 Marks (Internship Coordinator/HOD)
Performance of the Intern at work place	:	60 Marks (Trainer at workplace)

4.5.2 Dissertation

The dissertation of M.Lib.I.Sc., will be evaluated by both the project guide and the external examiner for 60 marks each. Average will be drawn to finalize the marks of end semester examination. The criteria for evaluation of the project report are as follows:

1. Organisation and Structure of Report	15	Marks
2. Literature Review	10	Marks
3. Style of Presentation	10	Marks
4. Standard of Methodology Adopted	10	Marks
5. Novelty and Utility	10	Marks
6. Referencing Style	05	Marks

The remaining 40 marks are reserved for viva-voce examination which will be conducted by the External Examiner/HOD in the Department.

4.6 Supplementary Exam

- a) A failed student who meets the attendance requirement and has a minimum of 40% in internal assessment marks may be permitted to reappear for the next end-semester examination.
- b) A student who has failed due to insufficient attendance and / or less than 40% in Internal Assessment marks should repeat the course as and when it is offered.

5. GRADING AND GRADE CARD

The Programme Committee shall prepare two copies of the results, one with marks to be sent to the University Office and another for the Department. Grades shall be awarded as indicated below (Section 5.1) in a meeting of the Programme Committee to be held as per the academic calendar of Pondicherry University.

The department shall display the provisional grades within 15 days. If a student wishes to look at the evaluated answer scripts he/ she can approach the concerned teacher within a week of declaration of the provisional results.

5.1 Letter Grades

Performances of students in each paper are expressed in terms of marks as well as in Letter Grades. In case of fractions the marks shall be rounded off to nearest integer. The class interval for the purpose of awarding the grades can be arrived at by dividing the difference between the highest mark secured and the minimum pass mark by 6 as there are six passing grades. The formula is given below:

$$K = (X-50)/6$$

Where, K = class interval, X= the highest mark in the subject.
The grades may be awarded as given in the following Table.

Table 1: Grading Method

Range of Marks in %	Letter Grade	Points for Calculate of CGPA
X to (X-K)+1	O	10
(X-K) to (X-2K)+1	A+	9
(X-2K) to (X-3K)+1	A	8
(X-3K) to (X-4K)+1	B+	7
(X-4K) to (X-5K)+1	B	6
(X-5K) to 50	C	5
Below 50	F	0
Failure due to lack of attendance	FA	0

6. Equivalence of M.Lib.I.Sc. to one year BLIS + one year MLIS

Most of the universities and other academic institutions in the country have migrated from one year BLIS and MLIS degrees to 2-Year integrated MLIS degree programme. But the recruitment rules (RR) for librarians in some government organizations like School Libraries of Puducherry, KVS, etc, have not been changed. The minimum qualifications required for these posts in these organizations are one year BLIS or one year MLIS which is not applicable to 2-year integrated MLIS degree holders. However, the modules taught in first year M.Lib.I.Sc. are equivalent to one year BLIS degree offered in any recognized university/college/institution in the country. And the modules taught in second year M.Lib.I.Sc. are equivalent to one year MLIS degree offered in any recognized university/college/institution. Therefore, **“the committee recommends to consider our M.Lib.I.Sc. degree as an equivalent to BLIS (one year) + MLIS (one year). This may also be printed in the certificates in future to avoid this kind of recognition problems in the employment market.”**

7. M.Lib.I.Sc. CURRICULUM STRUCTURE

Table 2: Details of Scheme of Course and Scheme of Examination

Course Code	Course Title	Hard Core/ Soft Core	No. of Credits	Marks
FIRST SEMESTER				
LISC411	Library, Communication and Society	HC	4	100
LISC412	Reference and Information Sources	HC	4	100
LISC413	Knowledge Organisation (Theory)	HC	4	100
LISC414	Knowledge Organisation (Classification Practice – I: DDC)	HC	3	100
LISC415	ICT for Information Management (Theory and Practice)	HC	3	100
SECOND SEMESTER				
LISC421	Management of Libraries and Information Centres	HC	4	100
LISC422	Information Systems and Services	HC	4	100
LISC423	ICT Practical – I	HC	3	100
LISC424	Knowledge Organisation (Cataloguing Practice-AACR 2R)	HC	3	100
LISC425	ILMS and Digital Libraries	HC	3	100
	Elective: (ANY ONE)			
LISC426	(i) Public Library System	SC	3	100
LISC427	(ii) Preservation and Conservation	SC	3	100
LISC428	(iii) School Library System	SC	3	100
THIRD SEMESTER				
LISC511	Library Internship (4 Weeks)	HC	2	100
LISC512	Information Representation and Retrieval (Theory and Practice)	HC	4	100
LISC513	Research Methods	HC	4	100
LISC514	ICT Practical – II	HC	3	100
LISC515	Soft Skills	HC	3	100
	Electives: (Any TWO)			100
LISC516	(iv) Technical Writing	SC	3	100
LISC517	(v) Ontology	SC	3	100
LISC518	(vi) Web Technology	SC	3	100
LISC519	(vii) Marketing of Information Products & Services	SC	3	100
FOURTH SEMESTER				
LISC521	Knowledge Management	HC	4	100
LISC522	Electronic Resources Management	HC	4	100
LISC523	Project/Dissertation	HC	4	100
	Elective: (Any ONE)			
LISC524	(viii) Informetrics	SC	3	100
LISC525	(ix) E-Publishing	SC	3	100
LISC526	(x) Intellectual Property Rights	SC	3	100
Total Credits			75	

Note: HC = Hard Core course, SC = Soft Core course

8. M.Lib.I.Sc. DETAILED COURSE CONTENTS

FIRST SEMESTER

LISC411 – Library, Communication and Society

4 Credits

COURSE OBJECTIVES

At the end of the course, the students will be able to:

- differentiate between data, information, and knowledge; types of libraries, their functions and role in the development of society;
- know the process of information generation including digital information and communicate them through different theories and models;
- be familiarized with the status of library legislation in India;
- understand the role and functions of various professional bodies in the development of libraries and information centres; and
- comprehend the national information policy and changing dimensions of knowledge society.

COURSE OUTLINE

Unit 1: Information: Nature, Property and Scope – Data, Information and Knowledge – Types of Libraries (including digital/electronic/virtual libraries) and their functions – Role of libraries in the development of a society – Information Theory – Information Science as a discipline – Five Laws of Library Science and their implications.

Unit 2: Information Generation and Communication – Information, Communication Process, Media and Diffusion – Communication Theories and Models, Channels and Barriers – Digital Information – Social Media.

Unit 3: Library Policies Movement and Legislation – Library movement in India, Indian Scenario – Factors, Principles, Statutory Provisions for various types of libraries, Information Policy, Copyright Act 1957, Delivery of Books and Newspapers Act 1956, Press and Registration Act, Intellectual Property Rights, Right to Information Act 2005.

Unit 4: Information Profession and Professional Bodies – Librarianship as a profession: Professional ethics – Professional Associations and their roles: ILA, IASLIC, IATLIS, CILIP, ALA, IFLA, and UNESCO.

Unit 5: Information and Knowledge Society – National Information Policy – Information Infrastructure: National and Global – Information Society – Knowledge Society – Knowledge Profession – Information Economy – WSIS.

Suggested Textbooks

Khanna, J.K. (1987). *Library and Society*. Kurukshetra: Research Publisher.

Kumar, P.S.G. (2003). *Foundations of Library and Information Science*. Paper I of UGC Model Curriculum. New Delhi: Manohar.

Kumar, P.S.G. (1997). *Fundamentals of information science*. Delhi: S.Chand.

Additional Readings:

Alvesson, M., & Benner, M. (2016). Higher education in the knowledge society: Miracle or Mirage?. In *Multi-level governance in universities* (pp. 75-91). Springer, Cham.

Belkin, N. J. (1978). Information concepts for information science. *Journal of documentation*, 34(1), 55-85.

Belkin, N. J. (1990). The cognitive viewpoint in information science. *Journal of information science*, 16(1), 11-15.

Bell, D. (1976, May). The coming of the post-industrial society. In *The Educational Forum* (Vol. 40, No. 4, pp. 574-579). Taylor & Francis Group.

Brookes, B. C. (1980). The foundations of information science. Part I. Philosophical aspects. *Information Scientist*, 2(3-4), 125-133.

Buckland, M. (1999). The landscape of information science: The American Society for Information Science at 62. *Journal of the Association for Information Science and Technology*, 50(11), 970.

Chapman, Elizabeth A. and Lynden, Frederick C. (2000). *Advances in Librarianship*. 24th Vol. San Diego: Academic Press.

Corcoran, M. (2000). Changing Roles of Information Professionals: Choices and Implications. *Online*, 24(2), 72-74.

Dervin, B. & Nilan, M. (1986): *Information needs and uses: a conceptual and methodological review*. Annual Review of Information Science and Technology 21: 3-33.

Dewey, B. (Ed.). (2010). *Transforming research libraries for the global knowledge society*. Elsevier.

Kumar, P. S. G. (2001). Indian Library Chronology. 2000. *HERALD OF LIBRARY SCIENCE*, 39(3/4), 241-241.

Martin, W. J. (2017). *The global information society*. Taylor & Francis.

- McGarry, K. J. (1993). *The changing context of information: an introductory analysis*. Library Assn Pub Ltd.
- McGarry, K. J. (1993). *The changing context of information: an introductory analysis*. Library Assn Pub Ltd.
- Meadows, A. J. (1987). *The origins of information science* (Vol. 1). Taylor Graham and the Institute of Information Scientists.
- Neill, S. D. (1992). *Dilemmas in the study of information: Exploring the boundaries of information science* (No. 70). Greenwood Publishing Group.
- Noam, E. M. (1998). Will Books Become the Dumb Medium? *Educom Review*, 33(2), 18-25.
- Phukan, A. B. (2000). *Various Aspects of librarianship and information Science*. Ess Ess.
- Ranganathan, S.R. (1999). *Five Laws of Library Science*, Ed. 2. Bangalore: Sarada Ranganathan Endowment for Library Science.
- Rayward, W. B. (1996). The history and historiography of information science: some reflections. *Information processing & management*, 32(1), 3-17.
- Roul, R.K. (1999). *Library Legislation in India*. New Delhi: Reliance.
- Rowley, J., & Hartley, R. (2017). *Organizing knowledge: an introduction to managing access to information*. Routledge.
- Rubin, R. E. (2017). *Foundations of library and information science*. American Library Association.
- Saracevic, T (1990) *Information Science revisited*: Rutgers University School of
- Saracevic, Tefko (1992) *Information Science: Origin, Evolution and Relations*. In: P. Vakkari and B. Cronin (Eds.), *Conceptions of Library and Information Science: Historical, Empirical, and Theoretical Perspectives* (pp. 5-27). London: Taylor Graham.
- Shera, J.H. & Cleveland, D.B: (1977) *History and foundations of information science*. *Annual Review of Information Science and Technology* 12: 249-275.
- Stehr, N. (2015). Knowledge Societies. In *The Blackwell Encyclopedia of Sociology*, G. Ritzer (Ed.). doi:10.1002/9781405165518.wbeosk011.pub2
- Stephen Grauberd & Paul Leclerc (1998). *Books, Bricks and Bytes: Libraries in the 21st Century*. Transaction Publishers.
- Surendra Singh & Sonal Singh. (2002) Ed. *Library Information and Science and Society*. New Delhi: Ess Ess,.
- Venkatappaiah, V. (1990) *Indian Library Legislation*. 2nd Vol. New Delhi: Daya,
- Webster, F. (2014). *Theories of the information society*. Routledge.

COURSE OBJECTIVES:

At the end of the course, the students will be able to:

- demonstrate the knowledge of the major information sources and reference tools which facilitate access to information;
- develop evaluative skills for selecting both in print and electronic information sources;
- use the major information sources to answer day-to-day user enquiries;
- select and describe the appropriate source to answer informational questions; and
- provide practical skills related to various reference tools to the students.

COURSE OUTLINE

Unit 1: Basics of Information Sources: Documentary and non-documentary sources – characteristics, scope and value; non-print and electronic sources; categories of information sources – primary, secondary and tertiary.

Unit 2: Types of Documentary Sources: Primary Sources – Periodicals, Technical reports, Patents, Standards and Specifications, Theses and Dissertations, Conference proceedings, Trade literature both in print and electronic versions; Secondary Sources – Dictionaries, Encyclopedias, Yearbooks and Almanacs, Biographical sources, Bibliographies, Geographical sources, Current sources, Statistical information sources, Handbooks and Manuals, indexing and abstracting sources, news summaries both in print and electronic versions. Tertiary Sources – Directories, Guides to reference sources, bibliography of bibliographies, monographs, list of serials, union catalogues, travel guides, textbooks both in print and electronic versions.

Unit 3: Non-Documentary Sources: Human and institutional sources of information, government ministries and departments, R&D organizations, learned societies, publishing houses, archives, data banks, information analysis centers, referral centers, and institutional websites.

Unit 4: Electronic Information Sources: Internet Information Resources – PLOS, DOAJ, E-Books, Open Access Resources, Open Educational Resources. Listserves, Subject Gateways. Criteria for the evaluation of information sources – print and electronic.

Unit 5: Databases (Full text, Citation and Bibliographic): ACM Digital Library, IEEE/IEE Electronic Library Online (IEL), Emerald, EBSCO, PsycINFO, Elsevier Science, PubMed Central, J-Gate, JSTOR, Web of Science, Scopus, SciFinder Scholar, , and RePEc.

Suggested Textbook

Bopp, Richard E. *Reference and Information Services : an Introduction*. 4th ed. Santa Barbara, Calif.: Libraries Unlimited, 2011.

Additional Readings

- Balay, Robert (1996). *Guide to Reference Books*. 11th ed. Chicago: ALA.
- Buckland, Michael K. (1997). What is a 'Document? *Journal of the American Society for Information Science*. 48(9): 804-809.
- Cassell, Kay Ann (2012). *Reference and Information Services: An Introduction*. 3rd edition. Neal-Schuman Publishers Inc; ISBN-10: 1555708595.
- Choudhury, G. G. (2001). *Information Sources and Searching on the World Wide Web*. London: Facet Publishing.
- El-Sherbini, Magda and Amanda J. Wilson (2007) "New Strategies for Delivering Library Resources to Users: Rethinking the Mechanisms in which Libraries are Processing and Delivering Bibliographic Records" *The Journal of Academic Librarianship*. 33(2): 228-242.
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- Guha, B. (1999). *Documentation and Information Services* (2nd ed.). Calcutta: World Press.
- Ikoja-Odongo, Robert, and Janneke Mostert. (2006) "Information seeking behaviour: A conceptual framework." *South African Journal of Library & Information Science*, 72(3): 145-158.
- Kuhlthau, Carol C. (1991) "Inside the Search Process: Information Seeking from the User's Perspective" *Journal of the American Society for Information Science*. 42(5): 361-371.
- Ladner, B. et al. (2004) "Rethinking Online Instruction." *Reference & User Services Quarterly*. 43 (4): p. 337-345.
- Laneaster, F.W. (1988). *Guidelines for evaluation of Information System and Services*. Paris: UNESCO.
- Radford, Marie L. (2008) "A Personal choice: reference service excellence" *Reference & User Services Quarterly*. 48(2): 108-115.
- Rettig, J. (2003) "Technology, Cluelessness, Anthropology, and the Memex: The Future of Academic Reference Service." *Reference Services Review*. 31(1):17-21.
- Rowley, J., & Hartley, R. (2017). *Organizing knowledge: an introduction to managing access to information*. Routledge.
- Seetharama, S. (1997). *Information Consolidation and Repackaging Framework, Methodology, Planning*. New Delhi: Ess Ess Publications.
- Singh, Gurudev. (2013). *Information sources, services, and systems*. New Delhi: PHI Learning Pvt. Ltd. ISBN – 9788120346390
- Smith, L. C., & Wong, M. A. (Eds.). (2016). *Reference and Information Services: An Introduction: An Introduction*. ABC-CLIO.
- Stebbins, L.F. (2006). *Student guide to research in the digital age: how to locate and evaluate information sources*.
- Walford, A. J. (1968-70). *Guide to Reference Materials* (3 Vols.). London: Library Association.

COURSE OBJECTIVES

At the end of the course, the students will be able to:

- explain the modes of formation of subjects and its characteristics;
- discuss the principles and philosophy of library classification;
- explain the types and needs for various types of library catalogues;
- understand and make use of the various bibliographic formats for effective management of bibliographic records; and
- understand various standards adopted in digital resource management.

COURSE OUTLINE

Unit 1: Library Classification – Meaning, need, purpose, functions – Notation: Need & Importance; types; qualities of a good notation, Mnemonics. Universe of knowledge – Structure and attribute – Modes of formation of subjects – Different types of subjects.

Unit 2: Principles of Classification – idea, verbal & notational planes; Facet analysis. Characteristics of Universal Library classification schemes CC, UDC, LC & DDC, Web Dewey.

Unit 3: Cataloguing: Purpose, structure, types including OPAC – Normative principles, Canons & Laws; Standard codes of Cataloguing – ISBDs and AACR, RDF.

Unit 4: Bibliographic Formats – ISO 2709, MARC-21, UNIMARC, CCF, Z39.50, W3C.

Unit 5: Organisation of Digital Resources – Metadata standards – Dublin core, Mark up languages; DOI (Digital Object identifier) – IFLA and LC initiatives – FRBR, FRAD, FRSAD, BIBFRAME 2.0

Suggested Textbooks

Krishan Kumar (1980). *Theory of Library Classification*, ED.2, New Delhi, Vikas.

Kumar. PSG. (2003). *Knowledge Organization, Information Processing and Retrieval Theory*, Delhi: BR.

Ramalingam, MS. (2000) *Library Cataloguing and Classification Systems*. Delhi: Kalpaz.

Ranganathan, SR. (1957 & 1965) *Prolegomena to Library Classification*, Ed2, London, LA.

Srivastava, A P. (1993) *Theory of Knowledge Classification in Libraries*. New Delhi, Sage.

Additional Readings

- Anglo American Cataloguing Rules. (1988) 2nd Ed. Rev. New Delhi, Oxford.
- Barbara M Westby, (1977) Ed. *Sears List of Subject Headings*, New York, HW Wilson.
- Berwick Sayers, W.C (1950). *Introduction to Library Classification*. London, Andra dautch.
- Byrne, Deborah J. (1998) *MARC Manual: Understanding and Using MARC Record*. Englewood, Libraries Unlimited.
- Chernyi, A.I. (1973) *Introduction to Information Retrieval Theory*. London, ASLIB.
- Dhyani, Pushpa. (1998) *Library Classification: Theory and Practice*. New Delhi: Vishwa Prakashan.
- Fritz, Deborah A. (1998) *Cataloguing with AACR2 and US-MARC Records*. Chicago, ACA.
- Hunter, E. J. (2017). *Classification made simple: an introduction to knowledge organisation and information retrieval*. Routledge.
- Jennifer, E. Rowledy. (1987) *Organising Knowledge: An Introduction to Information Retrieval*. Aldershot, Gower.
- Marcella, R., & Maltby, A. (2017). *The future of classification*. Routledge.
- Maxwell, Robert & Maxwell, Margaret F. (1997) *Maxwell's handbook of AACR2R: Explaining and illustrating the Anglo American Cataloguing Rules and the 1993 amendments*. Chicago: ACA.
- Ranganathan, SR, (1999). *The Five Laws of Library Science*. Bangalore: Sarada Ranganathan Endowment for Library Science.
- Ranganathan, SR. (1950). *Library Catalogue: Fundamentals and Procedures*, Madras, L.A.
- Ranganathan, SR. (1955) *Headings and Canons*. Madras, S. Vishwanathan.
- Ranganathan, SR. (1960) *Colon Classification*, 6th ed. Banalore: *Sarada Ranganathan Endowment for Library Science*.
- Ranganathan, SR. (1988) *Classified Catalogue Code*. Madras, UBSPD.
- Rijsbergen, CJ Van. (1970) *Information Retrieval*, 2nd ed., London, Butterworths.
- Sinha, Suresh C & Dhiman, (2002) Anil K. *Prolegomena to Universe of Knowledge*. New Delhi: Ess Ess.

LISC414: Knowledge Organisation (Classification Practice – I: DDC)

3 Credits

COURSE OBJECTIVES

At the end of the course, the students will be able to:

- be familiarized with the DDC 22nd Edition;
- acquire skills required for Classifying various types of documents;
- arrange and locate books shelved in the library; and
- develop an understanding of the organization of the library.

COURSE OUTLINE: Classification of Documents using Dewey Decimal Classification (22nd Edition)

Suggested Textbook

Khan, M. T. M. (2005). *Dewey Decimal Classification*. New Delhi: Shree Publishers.

Additional Readings

Comaromi, J. P., & Warren, M. J. (Eds.). (1982). *Manual on the use of the Dewey decimal classification, edition 19*. Albany, NY: Forest Press.

Dewey Decimal Classification. Edition 23rd. (2011). Ohio: OCLC.

Dhyani, Pushpa. (2006). *Classifying with Dewey Decimal Classification*, New Delhi: Ess Ess.

Mortimer, M. (2007). *Learn Dewey Decimal Classification (Edition 22)*. TotalRecall Pub.

LISC415 – ICT for Information Management (Theory and Practice)

3 Credits

COURSE OBJECTIVES

At the end of the course, the students will be able to:

- get acquainted with the components of Information Technology;
- acquire skills required for handling different operating systems;
- use application software for office management; and
- develop an understanding of the file organizations and database management systems.

COURSE OUTLINE

Unit 1: Understanding Information Technology: Components of Information Technology – Computer and Communication Technologies, types of computers – CPU, Storage and I/O Devices – Data representation in Computers: Binary Number System, Character encoding standards – ASCII, ISCII and UNICODE

Unit 2: Computer Software: System Software and Application Software; Programming Concepts: Open source and Propriety, Operating Systems: Windows & LINUX / UNIX. Working with windows. File organization & Database Management Systems.

Unit 3: Client-Server Architecture: Networks and Networking: Network topology, Networking – LAN, MAN, WAN, Internet, Intranet, Extranet.

Unit 4: Office Management: Word Processing, Spreadsheet, Presentation Software, Database (MS-Access)

Unit 5: DBMS – MySQL, Scripting Languages, .Net, Python, Java, HTML, XML, Web Graphics

Suggested Textbooks

Kashyap, M.M. (2003). *Database Systems*. New Delhi: Vikas.

Satyanarayana, R. (2005). *Information Technology and its facets*. Delhi: Manak.

Sunders, R. (2000). *Computers Today*. (Edition 2), John Wiley.

Additional Readings:

Bansal, S.K. (2005). *Information Technology and Globalisation*, New Delhi: A.P.H. Pub corporation.

Basandra, S.K. (2002). *Computers Today and Globalisation*, New Delhi:Golgotia.

Deeson, Eric (2000). *Managing with Information Technology*, Great Britan: Kogan page Ltd.

Forrester W.H.(2002) & Rowlands, J.L. *The Online searcher's companion*. London: LA.

Galliers, R. D., & Leidner, D. E. (Eds.). (2014). *Strategic information management: challenges and strategies in managing information systems*. Routledge.

Gupta, Vikas (2005). *Rapidex computer course*, New Delhi:Pustak Mahal.

Hunter & Shelly (2002). *Computers and Common sense*, New Delhi: Prentice-Hall.

Kumar,Arvind. (Ed.). (2006). *Information Technology For All (2 Vols.)* New Delhi, Anmol.

Rowely, Jennifer (2001). *Information Systems*, London: Clive Bingley.

Taxali Ravikant (2006): *PC software made easy*, New Delhi.

SECOND SEMESTER

LISC421 – Management of Libraries and Information Centres 4 Credits

COURSE OBJECTIVES

At the end of the course, the students will be able to:

- know the meaning, evolution and purpose of management;
- know how to manage library and information centres;
- understand different levels of management and various managerial skills required;
- understand the application of modern management techniques and methods in managing libraries and information centres; and
- apply the principles and procedures for developing an organisational structure for a library.

COURSE OUTLINE

Unit 1: Introduction to Management: Concept, definition and scope, management styles and approaches, principles and functions of management, principles of scientific management.

Unit 2: Collection Development and Management: Types of documents and selection and acquisition: tools, procedures and policies, problems and evaluation of collection development. Library operations - acquisition, serial control, technical processing, circulation & reference. Conservation & preservation, shelving, stock verification, binding and weeding out.

Unit 3: Human Resource Management: Objectives and functions – selection, recruitment, interviewing the candidates, training & staff development, performance appraisal, discipline and grievances. Manpower Planning – job description, job analysis, job evaluation. Motivation, leadership and ethics.

Unit 4: Financial Quality and Management: Financial responsibility and control, Budget planning and evaluation tools. Budgeting techniques – cost benefit, cost effective analysis and accounting. Accountability and reporting. Planning strategies: concept – definition – need and steps – MBO – planning techniques – decision making. Operations planning – Gantt Charts, PERT/CPM, TQM. Strategic planning process – SWOT analysis.

Unit 5: Management of LIC: Principles of organizational structure, organizational structure of Library and Information Centres. Library Authorities, library statistics, Library rules and regulations. Managing in the 21st century – today's organizations, skill required for new managers.

Suggested Textbook

Robert D. Stueart & Barbara. *Library and information center management*. Libraries Unlimited:Westport (Library and information science text series), ISBN 978-1-59158-408-7.

Additional Readings

Agee, J. (2007). *Acquisitions Go Global: an Introduction to Library Collection Management in the 21st Century*. Oxford: Chandos.

Blanche Woolls..*The School Library Media Manager*. Ed. 3.

Bryson, Jo. (1990). *Effective library and information centre management*. Gower:Hants.

Ciszek, M.P. & Young, C.L. (2010). *Diversity collection assessment in large academic libraries*:Collection Building, 29(4): 154-161.

Clayton, P. R. & Gorman, G.E. (2006). *Managing information resources in libraries: collection management in theory and practice*. Facet Publishing: London.

Drucker, P. (2012). *Management challenges for the 21st century*. Routledge.

Evans, G. E., & Alire, C. A. (2013). *Management basics for information professionals*. American Library Association.

Evans, G. E., & Saponaro, M. Z. (2012). *Collection management basics*. ABC-CLIO.

Evans, G.E. & Saponaro, M.Z. ed. 5.*Developing library and information center collections*. Libraries Unlimited:London.

Frances C. Wilkinson & Linda K. Lewis. *The Complete Guide to Acquisitions Management*.

Gregory, V. L. (2011). *Collection development and management for 21st century library collections: an introduction*. New York, NY: Neal-Schuman Publishers.

Johnson, P. (2014). *Fundamentals of collection development and management*. American Library Association.

Katz ,W.A.(1980). *Collection development: the selection of materials for libraries*. Holt,

Krishan Kumar (2007). *Library management in electronic environment*. Har-Anand

Macdonald, K. (2014). *Library and Information Science: A Guide to Key Literature and Sources*.

Matthews, J. (2005).*Strategic planning and management for library managers*. Libraries Unlimited:London.

McLean, Jaclyn (2012). *How to Manage Managing: a Guide for New Librarians*.

Mittal, R. (2007). *Library administration: theory and practice*. Ess Ess:New Delhi.

Munde, G. (2010). Considerations for managing an increasingly intergenerational workforce in libraries. *Library Trends*, 59(1), 88-108.

Seetharama, S.(1990). *Guidelines for planning of libraries and information centers*. IASLIC: Calcutta.

Stueart, R. D. & Moran, B.B. (2007). *Library and information center management*. Libraries Unlimited:London.

COURSE OBJECTIVES

At the end of the course, the students will be able:

- To induce information systems and identify international organisations devoted to collection, processing and dissemination of information;
- To explain the programmes and activities that are being undertaken by such organisations in promotion, coordination and development of library and information services;
- To discuss the development of reference and information service; differentiate between reference and information service;
- To discuss different types, role and function of reference services.
- To identify the information needs of different groups of users; and
- To explain the types of services library can offer to meet these information needs; and

COURSE OUTLINE

Unit 1: Information Systems: Concept, purpose & types. Global & National Information Systems; UNISIST, NISCAIR, NASSDOC, INIS, AGRIS, INSPEC and MEDLARS.

Unit 2: Resource Building and Sharing: Library networks; INFLIBNET, DELNET, OCLC, IFLA etc. Library Consortia in India, CSIR E-Journals Consortium, e-Shodh Sindhu, DELNET Consortium of E-Journals.

Unit 3: Reference Process: Digital reference service – Role and functions of Reference Librarian – Abstracting and Indexing Services – Information Analysis & Consolidation – Subject Guides and Mapping.

Unit 4: Information Services: CAS, SDI, Reprographic Service, Translation Service, Document Delivery, Referral Service, Newspaper clipping, Listserv, Blogs.

Unit 5: Information Use & User Studies: Theories and Models of Information Seeking behavior – Information Literacy.

Suggested Readings

Arunachalam, S. (2004). Open access and the developing world. *The National medical journal of India*, 17(6), 289-291.

Arunachalam, S. (2007). *Open access in India: Hopes and frustrations*. Available in <http://eprints.rclis.org/10833/>

Atherton, P. (1980). Handbook for information systems and services. In *Handbook for information systems and services*. UNESCO

Björk, B. C. (2014). Open access subject repositories: An overview. *Journal of the Association for Information Science and Technology*, 65(4), 698-706.

- Burch, J., & Grudnitski, G. (1989). *Information systems: theory and practice*. Wiley, Singapore.
- Chesnokova, A. (2016). Empirical Stylistics in an EFL Teaching Context: Comparing Virtual and Face-to-Face Reading Responses. by M. Burke, O. Fialho and S. Zyngier].– *Amsterdam/Philadelphia: John Benjamins*, 105-124.
- Fourie, I. (2006). How LIS professionals can use alerting services. Elsevier.
- Galyani Moghaddam, G., & Talawar, V. G. (2009). Library consortia in developing countries: an overview. *Program*, 43(1), 94-104.
- Godbole, N. (2008). *Information Systems Security: Security Management, Metrics, Frameworks And Best Practices (With CD)*. John Wiley & Sons.
- Gupta, B. M. (1984). *Handbook of libraries, archives & information centres in India*.
- Katz, W. A. (1974). *Reference services and reference processes*. McGraw-Hill.
- Kumari, N. (2017). E-Books Access Models, Suppliers and Readers. *Modern Technologies for Reshaping Libraries in the Digital Era*, 18.
- Laloo, B. T. (2002). *Information needs, information seeking behaviour and users*. EssEssPubl..
- Meadow, C. T. (1973). *The analysis of information systems*. New York: Wiley.
- Mills, K. (2009). M-Libraries: Information use on the move. *M-libraries*, 2, 235-44.
- Pawlak, Z. (1981). Information systems theoretical foundations. *Information systems*, 6(3), 205-218.
- Rothstein, S. (1961). Reference service: the new dimension in librarianship. *College & Research Libraries*, 22(1), 11-18.
- Seeholzer, J., & Salem, J. A. (2011). Library on the go: A focus group study of the mobile web and the academic library. *College & Research Libraries*, 72(1), 9-20.
- Sharma, C. K. (2006). *Reference Service and Sources*. Atlantic Publishers & Dist.
- Singh, G. (2013). *Information Sources, Services and Systems*. PHI Learning Pvt. Ltd..
- Stemper, J. A., & Butler, J. T. (2001). Developing a model to provide digital reference services. *Reference Services Review*, 29(3), 172-189.
- Suber, P. (2009). Timeline of the open access movement. Available in <https://legacy.earlham.edu/~peters/fos/overview.htm>.
- Suber, P., Brown, P. O., Cabell, D., Chakravarti, A., Cohen, B., Delamothe, T., ... & Johnson, R. K. (2003). *Bethesda statement on open access publishing*. Available in <https://dash.harvard.edu/handle/1/4725199>.
- Tripathi, A., & Lal, J. (2016). *Library consortia: practical guide for library managers*. Elsevier.
- Wilson, T. D. (1981). On user studies and information needs. *Journal of documentation*, 37(1), 3-15.
- Wilson, T. D. (1999). Models in information behaviour research. *Journal of documentation*, 55(3), 249-270.

LISC423: ICT Practical – I**3 Credits**

An in-depth practical on Integrated Library Management System using KOHA and Institutional Repositories using DSpace.

LISC424 – Knowledge Organisation (Cataloguing Practice-AACR 2R)**3 Credits****COURSE OBJECTIVES**

At the end of the course, the students will be able to:

- create catalogue entries for the Print resources; and
- create catalogue entries for Non-print resources using AACR 2R

COURSE OUTLINE: Cataloguing of Documents: Print and Non-Print using AACR-2R

Suggested Readings

- American Library Association (1978). *Anglo-American Cataloguing Rules* (2nd ed, 2002 revision) 2005 update. Chicago: American Library Association.
- Khan, M. T. M. (2005). *Anglo-American Cataloguing Rules*. New Delhi: Shree Publishers.
- Krishan Kumar. (1986). *An introduction to cataloguing practice*. (3rd Rev. Ed). New Delhi: Vikas Publishing.
- Ranganathan, S. R. (1988). *Classified Catalogue Code with additional rules for dictionary catalogue*. Bangalore: Sarada Ranganathan Endowment for Library Science.
- Satija, M. P. (2007). *Introduction to Nineteenth Edition of Sears List of Subject Headings*.
- Sears, M. E. (2010). *Sears List of Subject Headings* (20th ed). New York: H. W. Wilson.
- Singh, S. N. & Prasad, H. N. (1985). *Cataloguing Manual AACR-II*. Delhi: B. R. Publishing Corporation.

LISC425 – ILMS and Digital Libraries**3 Credits****COURSE OBJECTIVES**

At the end of the course, the students will be able to:

- understand the concept of library automation and how to implement in libraries;
- get familiarized with the automated services that can be rendered in libraries and information centres;
- know what a digital library is and how to design and develop it;
- understand the process of digitization and the related equipment;

- be aware of various software packages on library automation and digital libraries, free, open, and commercial.

COURSE OUTLINE

Unit 1: Foundations to ILMS – Historical Perspective, Need and Purpose - Approaches to Library Automation - Planning and Implementation of Library Automation - Formats and Standards - Retrospective Conversion – Housekeeping Operations – Acquisition, Serials Control, Cataloguing, Circulation – ILMS as Discovery Solutions, Library Management Solutions and Data Services.

Unit 2: ILMS based Innovative and Value Added Services – Alerting Services, Bibliographic Services, Document Delivery Services, Reference Services – Meta-searching and Unified Point of Discovery – Interoperability among ILMSs; ILMS' Seamless Integration with other Systems – Learning Management Systems and E-Learning Platforms.

Unit 3: Digital Libraries: Definitions, Characteristics, Collections – Digital Library Initiatives, Open Archives Initiative (OAI) and similar developments - Design and Organisation of Digital Libraries: Architecture, Interoperability, Protocols and Standards; User Interfaces – Open Data Repositories.

Unit 4: Digital Content Creation and Management: Digitization Process – Methods and Equipment – file formats - Digital Resources Management - Access to Digital Libraries, Storage – Digital Preservation.

Unit 5: Future Trends: Transforming Today's Library/Information Environment to Next-Gen Intelligent and Smart Information Systems – Seamless Integration of ILMS – E-Resource Management Systems, Digital Libraries and Digital Repositories into Single platform/system with unified data and unified workflows.

Suggested Readings:

- Chowdhury, G.G. (2003). *Introduction to Digital Libraries*. London: Facet Publishing.
- Cooper, Michael D. (1996). *Design of Library Automation Systems: File Structure, Data Structures and Tools*, New York: John Wiley.
- John M. Cohn, Ann L. Kelsey and Keith Michael Fiels. (1998). *Planning for Library automation: A Practical Handbook*, London: Library Association.
- John M. Colon, Ann L. Kelsey, Keith Michael Fiels. (1997) *Planning for Automation: A How-to-do-it for Librarian*. 2nd ed.(S.I.): Neal-Schuman.
- Kausik Bose. (1994). *Information Networks in India: Problems and Prospects* / New Delhi: Ess Ess Publications.
- Leona Carpenter, Simon Shaw & Andrew Prescott. (1998). *Towards the Digital Library*. London: LA.

- Lovecy, Ian. (1984). *Automating Library procedures: a survivor's handbook*. London: Library Association.
- Paul Pedley. (2001). *The invisible Web: Searching the hidden parts of the Internet*. London: Aslib.
- Rana, R. (2011). Research trends in library and information science in India with a focus on Panjab University, Chandigarh. *The International Information & Library Review*, 43(1), 23-42.
- Reynolds, Dennis. (1985). *Library automation: Issues and applications*. New York: Bowker.
- Wouters, P., Reddy, C., & Aguillo, I. (2006). On the visibility of information on the Web: an exploratory experimental approach. *Research evaluation*, 15(2), 107-115.

SOFT CORE COURSES

LISC426 – Public Library System

3 Credits

Unit 1: Public Library: Origin and Growth, Public Library and Society, Public Library services, Public Library systems and their branches, Agencies in the Promotion and Development of Public Library System, Missions, Goals, and Objectives, Library Policies, Procedures, Practices and Legislation of Public Libraries.

Unit 2: Public Library System & Library Buildings: Organizational Structure of Public Library System, Accountability – metrics and outcomes, quality of life and human development, Public Library Standards, Governance and Performance Evaluation of Public Libraries. Public library buildings, resources on building design, green and sustainable building, disasters and public libraries.

Unit 3: Resource Development & Management: Resource mobilization and financial resources, physical and documentary resources, Human Resource Development – interviewing & performance evaluation – continuing education and staff development. Technology in public libraries – application of information technology in public libraries, public librarianship and technology skills, E-resources and digital libraries, Library 2.0 and 3.0.

Unit 4: Community Information System: Understanding the community and assessment of its needs, serving the community, youth and adults services, and public library as the facility to community engagement. Collaboration and partnerships, social responsibility of public library – publicizing programs and services, evaluating services & programs. Bookmobiles & Book Bikes, building engagement, civic & community engagement, libraries transform, outreach strategies, universal access, working with community groups.

Unit 5: Collaboration, Consortia and Future Trends: Cooperation with other libraries, Consortia of state libraries, cooperating with the community and other libraries, Types of Library Services, Resource Sharing and Networking, Public Library Scenario in India, UK and USA. Global perspective of public Libraries. IFLA: a global voice for public Libraries.

Suggested Textbook:

Kathleen de la Peña McCook and Jenny S. Bossaller (2018). Introduction to public librarianship. 3rd edition. Chicago: ALA Neal-Schuman, an imprint of the American Library Association, 2018.

Additional Readings

Agosto, Denise E. (2008), Alternative Funding for Public Libraries: Trends, Sources, and the Heated Arguments that Surround It, in Danuta A. Nitecki, Eileen G. Abels (ed.) *Influence of Funding on Advances in Librarianship (Advances in Librarianship, Volume 31)* Emerald Group Publishing Limited, pp.115 - 140

ALA TechSource (2011), *The Transforming Public Library Technology Infrastructure*. Chicago, IL : ALA.

Bashir, Faiza; Soroya, Saira Hanif; Khanum, Almas (2018). Users' Satisfaction as a Valid Measure for Information Resources: A Case of Public Libraries. *Journal of Library Administration*, 58(3), 302-312.

Bertot, J. C.; McClure, C. R.; Jaeger, P. T.; Ryan, J. (2008). "Public libraries and the Internet 2008: Study results and findings". *Florida State University, Information Use Management and Policy Institute Website*.

Burke, S. K. (2016). Public Library Administration: Transparency on the Website. *The Library Quarterly*, 86(4), 449-467.

Cuillier, C., & Stoffle, C. J. (2011). Finding alternative sources of revenue. *Journal of Library Administration*, 51(7/8), 777-809.

Ekbote, Gopal Rao (1987). *Public Library system*. Hyderabad, 1987.

Epstein, D., Nisbet, E. C., & Gillespie, T. (2011). Who's responsible for the digital divide? Public perceptions and policy implications. *The Information Society*, 27(2), 92-104.

Gerding, S. (2007). Advocate for more: Focus on legislative funding. *Public Libraries*, 46(2), 36-39.

Goulding, A. (2009). Engaging with community engagement: public libraries and citizen involvement. *New Library World*, 110(1/2), 37 – 51.

- Hage, Christine Lind (2004). *The Public Library Start-up Guide*. Chicago : ALA.
- Hill, Heather. (2012). A Look at Public Library Management Outsourcing. *Public Libraries*, 51(3), 42-47.
- Holt, Leslie Edmonds; Holt, Glen E (2010). *Public Library Services for the Poor: Doing All We Can*. Chicago : ALA.
- Kelly, Thomas (1966) *Early Public Libraries: a history of public libraries in Great Britain before 1850* London: Library Association; p. 94
- Landau, Herbert B (2008). *The Small Public Library Survival Guide: Thriving on Less*. Chicago: ALA.
- Lyons, Ray. (2013). Rainy Day Statistics: U.S. Public Libraries and the Great Recession. *Public Library Quarterly*, 32 (2), 97-118- 22.
- Mc. Clovin (1950). L.R. public library extension. Paris. UNESCO.
- McCook de la Pena, K & Phenix, K. (2010). Public Librarianship. *Encyclopedia of Library and Information Science*. 3rd Edition.
- McCrossen, A. (2006). "One cathedral more" or "Mere lounging places for bummers"? The cultural politics of leisure and the public library in Gilded Age America. *Libraries & culture*, 41(2), 169-88.
- National Civic Review (2012). Public libraries and civic engagement, *National Civic Review*, 101(4), 3-64.
- Neiburger, E. (2012). *The end of the public library. (As we knew it)? In Book: A futurist's manifesto*, edited by Hugh McGuire & Brian O'Leary. Boston: O'Reilly. Pp. 269-275.
- Nooshi, Mohammad Reza; Tajafari, Masoumeh; Nowkarizi, Mohsen (2017). An investigation into promotional methods of public library services and resources: Users' perspective. *Annals of Library & Information Studies*. (64)4, 268-275.
- Pearlmutt, Jane; Nelson, Paul (2011). *Small Public Library Management*. Chicago, IL: ALA Editions.
- Predeek, Albert (1947) *A History of Libraries in Great Britain and North America*. Chicago: American Library Association; p. 58
- Saricks, Joyce G (2005). *Readers' Advisory Service in the Public Library*. 3rd ed. Chicago: ALA.

Schatteman, A., & Bingle, B. (2015). Philanthropy Supporting Government: An Analysis of Local Library Funding. *Journal of Public and Nonprofit Affairs*, 1(2), 74- 86.
http://216.146.225.242/index.php/jpna/article/download/18/pdf_13

Sharma, Pandey, S.K (2008). Development of public libraries in India .New Delhi.

Sherman, Scott (2017). How Citizen Action Saved the New York Public Library. *Nation*. 305(9), 20-24.

Sin, S. J. (2011). Neighborhood disparities in access to information resources: Measuring and mapping U.S. public libraries' funding and service landscapes. *Library & Information Science Research*, 33(1), 41-53.

Sinclair, N. Tanya (2017). Building a Learning Organization in a Public Library. *Journal of Library Administration*. 57(6), 683-700.

Sung, H. Y., Hepworth, M., & Ragsdell, G. (2013). Investigating essential elements of community engagement in public libraries: An exploratory qualitative study. *Journal of Librarianship and Information Science*, 45(3), 206-218.

LISC427 – Preservation and Conservation
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3 Credits

COURSE OBJECTIVES

At the end of the course, the students will be able to:

- explain the evolution of various information carriers;
- explain the characteristic of these information carriers and the problems they face;
- discuss the effect of various disasters and calamities on the Library collections; and
- explain the need for preservation and conservation.

COURSE OUTLINE

Unit 1: Elements of Preservation and Conservation - Need for Preservation and Conservation – Evolution of Writing Materials – Palm Leaves `Birch' Bark, Manuscripts, Print and Non-Print Media – Preservation and Conservation Techniques.

Unit 2: Hazards to Library Materials and Control Measures – Environmental Factors, Biological Factors, Chemical Factors, Disaster Management

Unit 3: Binding – Types of Binding – Binding Materials – Binding Process – Standards of Binding

Unit 4: Restoration and Reformatting – Material Repair – Microfilming and Digitisation of Print Media

Unit 5: Emerging Trends – Digital Archiving, Digital Preservation, Digital Curation, Cloud Storage.

Suggested Textbooks

Ramaiah, L. S (2008). *Preservation of Library Archival and Digital Documents Problems*. New Delhi: Ess Ess Publications.

Balloffet, Nelly (2009). *Preservation and Conservation for Libraries and Archives*. New Delhi: Ess Ess Publications.

Additional Readings

Adams, H. R. (2013). IF Matters: Intellectual Freedom@ your library®. *Protecting Intellectual Freedom and Privacy in Your School Library*, 25(10), 109.

Greig, A. D., Taylor, J., & MacKay, T. (2012). *Doing research with children: A practical guide*. Sage.

Wallace, V., & Husid, W. (2011). The Achievement-Assessment Link. *Library Media Connection*, 30(2), 10-11.

LISC428 – School Library System
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3 Credits

COURSE OBJECTIVES

At the end of the course, the student should be able to:

- get an idea about the role of the school library within the local and national contexts of a changing educational scene;
- establish an understanding of library and its role in the school.
- find out the key issues emerging in school librarianship ranging from information access to roles in school reform and student achievement;
- know theories and processes involved in managing personnel, resources, facilities, and finances;
- develop evaluation skills of school library, its services and programmes.

COURSE OUTLINE

Unit 1: Mission, Purposes, Legal and Financial Framework for a School Library – Definition and role of a school library, vision and mission statement for a school library, objectives, functions and importance of school libraries. Apply legal and ethical principles/ issues that govern information access, intellectual property rights, and the use of technology tools and online resources. Infrastructure support for school library development, policies, planning, and funding. IFLA/ UNESCO’s School Library manifesto, instructional role of a school librarian.

Unit 2: Human Resources for a School Library – Definition of a school librarian, roles of a professional school librarian – instruction, management, leadership and collaboration, community engagement, and promoting library services. Staffing roles and rationale, roles and competencies of para-professional school library staff, role of school library volunteers, ethical standards. Concepts, strategies and techniques of administering a school library. Competencies needed to provide school library programs.

Unit 3: Physical and Digital Resources of a School Library – Facilities – location and space, organization of space, physical and digital access. Collection development and management - policies and procedures, issues related to digital resources, collection standards and Resource sharing. Policy development, budgeting, collection development, instructional design, support staff training, facilities design, supervision, and information networking within the school. School library standards.

Unit 4: Programs and Activities of a School Library - Programs and activities, information literacy, reading promotion, media and information literacy instruction, inquiry-based learning models, technology integration, professional development for teachers, and instructional role of a school librarian.

Unit 5: School Library Evaluation and Public Relations – Evaluation of a school library services and programs, evaluation of a school library and evidence-based practice, approaches to school library program evaluation, impacts of school library program evaluations. School library public relations - promotion and marketing, advocacy. access to library services, reference services, personnel, fiscal, collection management, and consortia arrangements. Latest trends in school libraries.

Suggested textbook

Farmer, L. S. J. (2017). *Managing the Successful School Library: Strategic Planning and Reflective Practice*. Chicago, IL: Neal-Schuman.

Additional Readings

Adams, H. R. (2008). *Ensuring Intellectual Freedom and Access to Information in the School Library Media Program*. Westport, CT: Libraries Unlimited.

American Association of School Librarians & Association for Educational Communications and Technology. (1998). *Information power: Guidelines for school library media programs*. Chicago: American Library Association.

American Association of School Librarians [AASL] (2013). *Empowering Learners: Guidelines for School Library Programs*. EBook edition.

- American Association of School Librarians and Association for Educational Communications and Technology (1998). *Information Power: Building Partnerships for Learning*. Chicago: American Library Association.
- American Association of School Librarians (2007). *Standards for the 21st-Century Learner*. Chicago: American Library Association.
- Anderson, Cynthia(2005). *District Library Administration: A Big Picture Approach*. Columbus, OH: Linworth Publishing, Inc., 2005.
- Andronik, Catherine (2003). *School Library Management*, 5th ed. Worthington, OH: Linworth Publishing, 2003.
- Baule S. B. (2007). *Facilities Planning for School Library Technology Centers*. 2nd ed. Worthington, OH: Linworth Books.
- Baule, Steven M (2001). *Technology Planning for Effective Teaching and Learning*, 2nd ed. Worthington, OH: Linworth Publishing.
- Boardman, Edna (1994). "The Knapp School Libraries Project: The Best \$1,130,000 Ever Spent on School Libraries". *Book Report*. 13 (2): 17–19. ISSN 0731-4388. ERIC # EJ489785.
- Carvalho, L., & Goodyear, P. (2014). *The architecture of productive learning networks*. Routledge.
- Developing 21st Century Literacies (2011): *A K-12 School Library Curriculum Blueprint with Sample Lessons*. Chicago, IL: ALA.
- Dickinson, G., K. Gavigan, and S. Pribesh. (2008). "Open and Accessible: The Relationship between Closures and Circulation in School Library Media Centers." *School Library Media Research*.
<http://www.ala.org/aasl/aaslpubsandjournals/slmrb/slmrcontents/volume11/dickinson>
- Dorman, G. (1981). *The Middle Grades Assessment Program: User's Manual*. Carrboro, NC: Center for Early Adolescence.
- Felmley, D. (2010). How far should courses in normal schools and teachers' colleges seek to acquaint all teachers with the ways of organizing and using school libraries?. *Journal of Proceedings and Addresses of the Forty-Sixth Annual Meeting Held at Cleveland, Ohio*, 1087-1095. Doi:10.1037/e597422010-207

- Fiore, D. (2016). *School-community relations*. Routledge.
- Hart, T.L. (2006). *The School Library Media Facilities Planner*. New York, NY: Neal-Schuman
- Hopkins, J. (2004). "School library accessibility: the role of assistive technology." *Teacher Librarian*, 31(3), 15.
- Intellectual Freedom Manual (2005). 7th ed. Chicago: American Library Association.
- Jones, P. (2002). *New directions for library service to young adults*. Chicago: American Library Association.
- Kerby, R.N. (2008). *Collection Development for the School Library Media Center: A Beginner's Guide*. Chicago, IL: ALA.
- Lonsdale, M. (2013). *Impact of school libraries on student achievement: A review of the research*. Camberwell, Victoria, Australia: Australian Council for Educational Research. Available online at <http://www.asla.org.au/site/DefaultSite/filesystem/documents/research.pdf>
- Marquardt, L. and Oberg, D. (2011). *Global Perspectives on School Libraries: Projects and Practices*, IFLA Publications, Vol. 148.
- Michie, Joan S., et al (2005). *Fifty Years of Supporting Children's Learning: A History of Public School Libraries and Federal Legislation from 1953 to 2000*. NCES 2005-311.: ERIC, EBSCOhost.
- Morris, Thomas, M. J. & Perritt, P.H. (2003). A Higher standard: Many states have recently revised their certification requirements for school librarians. *School Library Journal*. Available online at <http://www.schoollibraryjournal.com/article/CA339562.html?industryid=47056>
- Morris, B. (2013). *Administering the school library media center*. Westport, CT: Libraries Unlimited. (p.32).
- Morris, Betty J (2004). *Administering the School Library Media Center, 4th Edition Revised and Expanded*. Westport, CT: Libraries Unlimited.
- Pike, M. A. (2007). "Values and Visibility: The Implementation and Assessment of Citizenship Education in Schools." *Educational Review*, 59(2).

Santa Clara County Office of Education, Library Services (2001). *Where Do I Start?: A School Library Handbook*. Worthington, OH: Linworth Publishing.

Schultz-Jones, Barbara, A. and Oberg, D. (2015). "Global Action on School Library Guidelines." IFLA Publications, De Gruyter Saur, 167.

Simpson, Carol (2005). *Copyright for Schools: A Practical Guide*, 4th ed. Worthington, OH: Linworth Publishing.

Smith, K. (2002). "Building Student Learning Through School Libraries." Statement delivered at the *White House Conference on School Libraries*, available from: http://www.ims.gov/news/events/whitehouse_3.shtm

Stephens, Claire Gatrell and Franklin, Patricia (2007). *Library 101: A Handbook for the School Library Media Specialist*. Westport, CT: Libraries Unlimited.

Sullivan, M. W. (2013). *Library Spaces for 21st-Century Learners: A Planning Guide for Creating New School Library Concepts*. Chicago, IL: American Association of School Librarians (AASL)

Todd, R., Kuhlthau, C., & OELMA. (2014). *Student Learning through Ohio School Libraries: The Ohio Research Study*. Available online at: <http://www.oelma.org/studentlearning/>

Toor, Ruth and Weisburg, Hilda K (2007). *New on the Job: A School Library Media Specialists' Guide to Success*. Chicago: American Library Association.

Vedung, E. (2017). *Public policy and program evaluation*. Routledge.

Woolls, B. and Loertscher, David V. (2014). *The Whole School Library Handbook 2*, 2nd ed., Chicago: ALA editions.

Woolls, Blanche (2008). *The School Library Media Manager*, 4th Edition. Westport, CT: Libraries Unlimited.

Young, P. R. (2017). Librarianship: a changing profession. In *Books, Bricks and Bytes* (pp. 103-126). Routledge.

THIRD SEMESTER

LISC511 – Library Internship

2 Credits

COURSE OBJECTIVES

At the end of the course, the students will be able to:

- realize the importance of libraries, archives, and museums in disseminating information to the citizens of the country;
- develop confidence through practical knowledge gained from the libraries; and
- work in a library or information centre independently based on the knowledge acquired through the library internship

The students need to undergo an Internship for one month in any reputed libraries, archives, and museums during summer vacation that falls between second and third semesters. The students can select any institution of their choice in the country and report to the Internship Coordinator/HOD for getting formal approval from the institution concerned. The students are expected to strictly adhere to the following Internship Guidelines:

- 1 The internship is an assessable component for 2 credits by the Trainer and the Internship Coordinator (HOD).
- 2 You are expected to be sincere and obedient in your work during your internship following the instructions of the Trainer (The Librarian) at your Library.
- 3 You need to keenly observe every activity performed in the library and correlate with your theoretical knowledge gained.
- 4 Availing any leave during the period of internship is not allowed. Failing which, you will have to repeat next time in order to complete the course successfully.
- 5 A detailed report has to be submitted to the Internship Coordinator (HOD) based on your experience and knowledge gained through internship after successful completion of your internship. In addition, you need to give a presentation based on your Internship report for assessment.
- 6 To maintain a work diary during internship period is a must. Every student should maintain work diary for the activities performed by you on day-to-day basis in the following manner. This would enable you to prepare your internship report conveniently.

Date	Time Slot	Trainer's Name and Section	Activities Performed	Signature of the Librarian
10.5.xxxx	10 a.m. – 11 a.m. 11 a.m. – 12 p.m. 12 p.m. – 1 p.m. 2 p.m. – 3 p.m. 3 p.m. – 4 p.m. 4 p.m. – 5 p.m.	Dr Raja/ Acquisition Section	<ul style="list-style-type: none"> • Compilation of users' request • Checking of Duplicates • Preparation of final list of titles • Checking of Invoices • Accessioning books • Book processing 	

The work diary maintained for 30 days, as per the above instructions, has to be submitted to the Internship Coordinator along with the Internship Report.

LISC512 – Information Representation and Retrieval (Theory and Practice)
4 Credits

COURSE OBJECTIVES

At the end of the course, the students will be able to:

- acquire skills required for indexing various kinds of documents;
- get familiarized with the indexing systems;
- retrieve documents precisely by using different search strategies; and
- develop an understanding of the organization of information storage and retrieval systems.

COURSE OUTLINE

Unit 1: Information Retrieval Systems: Concept, definition, characteristics, components and functions – Digital IR System – Multilingual IR, Multimedia IR, Intelligent IR and NLP.

Unit 2: Indexing Systems: Problems in subject analysis and representation- Semantics and Syntax. Indexing Language and Vocabulary Control: Thesaurus- Structure, Functions and Compilation. Pre coordinate and post coordinate indexing systems. Keyword Indexing, Citation Indexing, Natural Language Indexing and Automatic Indexing

Unit 3: Information Retrieval Models: IR Models- Probabilistic, Cognitive and Vector models. Query formulation and Search strategies – Basic and advanced – Boolean, Truncation and Proximity - Digital IR Systems – Types, Features, File Design and Organisation– Multiple Database Searching – Common Command Language, NISO and ISO Standards, Multilingual/Cross-Lingual IR Systems & Projects – Web Information Retrieval – Meaning, Scope, Characteristics, Models and Standards, Web Indexing, Semantic Web.

Unit 4: Evaluation of Information Retrieval Systems: Meaning, Purpose, Criteria and Levels of IR Evaluation. Major Evaluation Studies – MEDLARS, SMART, STAIRS and Project TREC.

Unit 5: Hands on Practical: Database Searching (Textual, Referral, and Reference)

Suggested Textbook

Chowdhury, G.G. (1999). Introduction to modern information retrieval. London: Library Association.

Chowdhury, G.G. (2010). Introduction to Modern Retrieval System. 3rd Ed. London: Facet Publishing.

Additional Readings

Aitchison, Jean, Gilchrist, Alan and Bawdown, David (1990). *Thesaurus Construction and Use: A practical manual*. 4th Ed. ASLIB.

Becker, Joseph and Robert M Hayes (1967). *Information Storage and Retrieval tools Elements & Theories*. New York: John Wiley.

Büttcher, S., Clarke, C. L., & Cormack, G. V. (2016). *Information retrieval: Implementing and evaluating search engines*. Mit Press.

Cleveland, Donald B and Cleveland, Ana D (2001). *Introduction to indexing and abstracting*. Colorado: Libraries Unlimited.

Convey, John. (1992). *Online Information Retrieval: An Introductory Manual to Principles and Practice*. 4th ed. London.

Elis, David (1996). *Progress and Problems in Information Retrieval*. London: Library Association.

Fosket, A.C. (1992). *Subject Approach to Information*. London: Clive Bingley.

Fosket, A.C. (1996). *Subject approach to information*. Ed.5. London: Library Association.

Fugman, Robert (1993). *Subject Indexing and Analysis Theoretical Foundations & Practical Advice*. Frankfurt: Index Verlag.

- Gosh, S B and Satpathi J N.(1998) *Subject indexing system: concepts, methods and techniques*. Calcutta: IASLIC.
- Grolier, Eric de. (1962). *A Study of general Categories Applicable to Classification and Coding in Documentation UNESCO*.
- Korfhage, R R (1997). *Information storage and retrieval*. New York: John Wiley.
- Kraft, D. H., Colvin, E., Bordogna, G., & Pasi, G. (2015). Fuzzy information retrieval systems: A historical perspective. In *Fifty Years of Fuzzy Logic and its Applications* (pp. 267-296). Springer, Cham.
- Lancaster, F Wilfred (2003). *Indexing and abstracting in theory and practice*. Ed. 3. Urbana: University of Illinois.
- Lancaster, F Wilfred (2003). *Vocabulary control for information retrieval*. Ed. 2. 1985. Information Resource Press, Arlington.
- Lancaster, F.W. (1977). *The Measurement and Evaluation of Library Science*. Information Sources Press.
- Lavrenko, V., & Croft, W. B. (2017). Relevance-based language models. In *ACM SIGIR Forum*. 51(2): 260-267.
- Losee, Robert M. (1998). *Text retrieval and Filtering: Analytical Models of Performance*. London: Kluwer.
- Meadow, Charles T. (2000). *Text Information retrieval system*. Academic Press.
- Sharp, Harold S. (1964). *Readings in Information Retrieval*. London: The Scarecrow Press.
- Soergel, D. (1974). *Indexing languages and thesauri: construction and maintenance*. New York: John Wiley and Sons.
- Soergel, Dagobert. (1974). *Indexing Languages & Thesaurus Construction & Maintenance*. Los Angeles: Melville Pub. House.
- Soergel, Dagobert. (1985). *Organizing Information. Principles of Database & Retrieval Systems*, Academic Press.

COURSE OBJECTIVES

At the end of the course, the students will be able to:

- understand the basics of research which include how to identify a research problem and do a comprehensive literature review;
- be familiarized with different types of research design, formulation of hypotheses, sampling techniques, and how to prepare a research proposal;
- adopt a suitable data collection method and tool based on the nature of research problem;
- know how to test hypotheses by applying appropriate statistical tools such as T-Test, Chi-Square, ANOVA, Correlation Analysis;
- use the statistical software package called Statistical Package for Social Sciences; and
- prepare a research report adhering to the structural components as prescribed in style manuals like Chicago, MLA, APA, etc.

COURSE OUTLINE

Unit 1: Basics of Research: Concept, Definition, Objectives, Types and Significance – Research Problem – Identification, Selection and Formulation – Literature Review – Sources, Process, and Limitations – Ranganathan’s Spiral of Scientific Method.

Unit 2: Research Design: Definition, Need, Types and Components – Hypothesis – Definition, Formulation, Types and Testing – Sampling – Concept and Need of study population and Sampling, Types of Sampling Techniques – Probability and Non- Probability, Derivation of Sample, Sample Bias and Error – Preparation of a Research Proposal – Components and Steps.

Unit 3: Methods and Tools: Survey, Experimental, Case-study, Historical, and Scientific – Sources of Data – Primary, Secondary, and Tertiary – Data Collection Tools - Questionnaire, Interview, Observation, Delphi – Measures and Scaling Techniques.

Unit 4: Statistical Tools: Need and Importance, Descriptive and Inferential Statistics – Measures of Central Tendency – Standard Deviation – T-Test, Chi-Square, ANOVA, Correlation Analysis – Introduction to SPSS.

Unit 5: Presentation and Reporting: Presentation of Data – Creation of Tables, Charts and Figures – Interpretation, Inferences – Deductive and Inductive – Report Writing – Components and Evaluation of a Research Report – Style Manuals – Chicago, MLA, APA – Introduction to Reference Manager – Ethics in Research and Publication.

Suggested Textbooks

- Goode, W.J & Hatt, P.K (1989). *Method of Social Research*. McGraw Hill. Auckland.
- Kothari, C.R. (1990). *Research Methodology*: Ed2 Wishwa. New Delhi.
- Krishna Kumar (1992). *Research methods in library in social science*. Vikas, New Delhi.

Additional Readings

- Auger (1961). *Current trends in scientific research*. UNESCO, Paris.
- Bhandarkar. P.L & Wilkinson. T. S (1992). *Methodology & techniques of Social research* Ed.9 Himalaya. Bombay.
- Bundy.M.L & Wasserman.P (1970). *Reader in research methods in librarianship; techniques and interpretation: academic*, New York.
- Busha, Charles, H. and Harter, Stephen, S (1980). *Research Methods in Librarianship. Techniques and Interpretation*. Orlando, Academic press.
- Chapin.F.S (1974): *Experimental designs in sociological research* Rev Ed. Greenwood Press, Westport.
- Charles, H. et.al (1993). *Research Methods in Librarianship: Techniques and Interpretations*. New Delhi, Sage.
- Downs, R.B & Down, E (1966). *How to do library research*. University of Illinois Press, Urbana.
- Fowler, F.J. (1993). *Survey Research Methods*. New Delhi, Sage.
- Gopal, M.H (1990). *An introduction to research procedure in social sciences*. Asia, Bombay.
- Krishna Swamy, O.R (1993). *Methodology of research in social sciences*. Himalaya, Bombay.
- Line, Maurice.B (1982). *Library surveys; an introduction to the use, planning procedure and presentation of survey*. Ed2 Clive Bingley, London.
- Ravichandra Rao, I.K (1988). *Quantitative methods in library and information science*, Wiley Eastern. New Delhi.
- Slatter, Margaret (1990). *Research, methods in library and information science*. London, L.A.
- Stevens, Rolland, E. (1971). *Research methods in librarianship*. Clive Bingley, London.
- Tabuer, M.F and Stephens, I.R (1968). *Library surveys*. Columbia University Press, New York.

Wilson, E.S. (1952). *Introduction to scientific research*. McGraw Hill, New Delhi, 1952.

Young, P.V. (1982). *Scientific social surveys and research*. Ed4. Prentice Hall of India, New Delhi.

LISC514 – ICT Practical – II	3 Credits
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An in-depth practical on Digital Library Software using GSDL and Content Management System using Drupal.

LISC515 – Soft Skills	3 Credits
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COURSE OBJECTIVES

At the end of the course, the students will be able to:

- understand and identify their strengths and weaknesses;
- know how to effectively speak formally at different stages using various strategies;
- make use of various tools and techniques available for effective writing including preparation of a project proposal
- understand various workplace skills required for being a competent professional; and
- know how to acquire job related skills such as preparing personal profile, interview, and public relations.

COURSE OUTLINE

Unit 1: Personality Development: Understanding personal strengths and weaknesses, work and organisational psychology – Stress management, Time management and crisis management – Communication Skills – Interpersonal, Intrapersonal, and Group.

Unit 2: Effective Speaking – Elements and types – impromptu speech, memorized speech, manuscript speech, extemporaneous speech – stages and strategies.

Unit 3: Writing Skills – Principles of presentation of ideas – Techniques and tools for effective writing – Internal and External correspondence at the workplace – preparation of a project proposal/research papers.

Unit 4: Workplace Skills – Telephone Skills – Group Discussion - Body Language. Leadership and working in teams – Knowledge Sharing – Team Development.

Unit 5: Job Related Skills – Preparing Personal Profile, Portfolio, Resume – Job Interview – Public Relations; Different types of meetings and Negotiation Strategies.

Suggested Textbook

Alex, K. (2017). *Soft Skills*. New Delhi: S.Chand.

Additional Readings

Allan, & Pease, Barbara (2004). *The Definitive Book of Body language*. Australia: McPherson's Printing Group.

Banks, T. (2012). *Writing for Impact*. Cambridge University Press.

Batteger, Richard P.(1985). *Business Writing, Process and Forms*. California : Wadsworth Publishing Company.

Beattie, G. (2003). *Visible Thought the New Psychology of Body Language*. Routledge.

Bowden, J.(2011). *Writing a Report: How to Prepare, Write & Present Really Effective Reports*, How To Books.

Bowstead, J.M. (2011). *A Guide to Preparing your Portfolio*. A&C Black.

Brock, Susan L. (2004). *Better Business Writing: Techniques for Improving Correspondence*, Crisp Learning.

Brown, D. (2013). *Preparing and Managing Your Career Portfolio*.

Corfield, R. (2009). *Preparing the Perfect CV: How to Make a Great Impression and Get the Job You Want (Career Success)*.

Corfield, R. (2010). *Preparing the Perfect CV*. Kogan Page India Private Limited.

Dignen, B. (2013). *Communicating in Business English (with Audio CD)*. Compass Publishing

Enlow, Wendy S., & Boldt, Arnold G. *No-Nonsense Resumes: The Essential Guide to Creating Attention-Grabbing Resumes That Get Interviews & Job Offers*. Career Press.

Forsyth, P. (2009). *How to Be Better at Writing Reports and Proposals*, Kogan Page Ltd.

Furman (2003). *Effective Group discussion: Theory and Practice*. McGraw-Hill.

Greenhall, M. (2004). *Report Writing Skills Training Course*. Lancashire : University of Learning Ltd.

Gupta, N. K. (2012). *Cracking the Job Interviews*. G4 IBC Academy.

Hamper, R. J., & Baugh, L. (2011). *Handbook for Writing Proposals*, (2nd ed.). McGraw Hills.

Hamp-Lyons, Liz & Heasley, Ben (2006). *Study Writing*. (2nd ed.). Cambridge University Press.

Hewings, M. & Thaine, C. (2012). *Cambridge Academic English CI Advanced Student's Book*. Cambridge University Press.

Hughes, J, & Mallett, A. (2012). *Successful Presentations DVD and Student's Book Pack*. Oxford University Press.

Patnaik, P. (2011). *Group Discussion and Interview Skills with CD*. India : Cambridge University Press.

- Rogers, J.(2011). *Job Interview Success: Your Complete Guide to Practical Interview Skills*. McGraw-Hill Professional Publishing.
- Samson, T. (2008). *Business English (with Audio CD)*. Tata McGraw-Hill Education.
- Schnurr, S.(2012). *Exploring Professional Communication*. Routledge.
- Smith, David G, (2007). *Express Series English for Telephoning*. Oxford University Press.
- Sweeney, S. (2012). *English for Business Communication Students Book with Audio CD*, India : Cambridge University Press.
- Taylor. (2009). *Brilliant Business Writing: How to Inspire, Engage and Persuade Through Words (1st ed.)*. Pearson.
- Thomas, P. (2004). *English Grammar Composition and Effective Business Communication (12th rev ed.)*. India : S. Chand.
- Whitmore, T.(2011). *How to Write an Impressive CV & Cover Letter*. Rupa &Co.
- Wyrick, Jean. (1990). *Step to Writing Well with Additional Readings .(6th ed.)*. Boston: Thomson Wadsworth.

SOFT CORE COURSES (ANY TWO)

LISC516 – Technical Writing

3 Credits

COURSE OBJECTIVES

At the end of the course, the students will be able to:

- basics of technical writing and its types along with their characteristics;
- understand how to prepare short communications, review articles, technical report, monographs, project proposals, dissertations/theses and house bulletins;
- get familiarized with the editorial process and editorial tools such as Dictionaries, Style Manuals, Standards and specifications;
- acquire the knowledge on effective presentation of ideas by using Tables, Line graphs, Bar graphs, Pie charts, Charts, and Illustrations; and
- understand the criteria for evaluation of scientific and technical communications and presentations.

COURSE OUTLINE

Unit 1: Basics of Technical Writing – Definition, Overview, Purpose, Types, Characteristics, Functions – Target group in Written Communication – Reader / Writer Relationship.

Unit 2: Technical Writing Process: Definition, Structure, Purpose, Characteristics and functions. Readability and Aberrations in Technical Writing – Preparation of Short Communications, Review Articles, Technical Report, Monographs, Project proposals, dissertations/theses and House Bulletins.

Unit 3: Technical Editing and Editorial Tools: Editor – Editorial process – Editorial Tools - Dictionaries, Style Manuals, Standards and specifications.

Unit 4: Technical Writing Techniques – Information searching and gathering skills - Designing pages – Elements of page design, basic design guidelines, developing a style sheet - Visual aids - Tables, Line graphs, Bar graphs, Pie charts, Charts, and Illustrations

Unit 5: Technical Presentations and Evaluation – Use of MS-Office for the preparation, production and presentation of scientific and technical communications – use of multimedia facilities for presentation – Criteria for evaluation of scientific and technical communications and presentations – Technical Writing Software Tools.

Suggested Readings

Anderson, Paul V. & Miller, Carolyn (ed). *New essays in Technical and scientific communication: Research, theory and Practice*. Baywood : Farmingdale.

Day, Robert A. (1989). *Writing scientific papers in English* (2nd ed.). Philadelphia: ISI.

Elbow, Peter. (1973). *Writing without teachers*. New York : Oxford University Press.

Gowers, Sir. Ernest (1954). *The complete plain words*. London: HMSO.

Holsinger, Donald C. (1991). *A classroom laboratory for writing history*. *Social studies review*. 31(1), 59 – 64.

Joshi, Yateendra (2003). *Communicating in style*. New Delhi: TERI.

Kapp, Ro (1948). *The presentation of technical information*. London: Constable.

Kirkman, John (1980). *Good style for scientific and engineering writing*. London: Pitman.

Parry, John. (1967). *The psychology of human communication*. London : University of London Press.

Ramage, John D. & Bean, John C. (2000). *The allyn and bacon guide to writing*. (2nd ed.,). London : Allyn and Bacon.

Riodarn, Daniel G. & Pauley, Steven E. (2004) *Technical report writing today*. (8th ed.). New Deli: Biztantra.

Society for Technical Communication. *Code for communicators*. (1998). Washington D C : STC.

Staples, Catherine & Ornatowski, Cezar (Ed). (1997) *Foundations for teaching technical Communications: Theory, Practice and Program Design*. Greenwich: Ablex.

Turk, Christopher & Kirkman, John (2007). *Effective writing: Improving scientific, technical and business communication*. (2nd ed.). London: Spon Press.

Winokur, Jon (1986). *Writers on Writing*. Philadelphia running press.

LISC517 – Ontology	3 Credits
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COURSE OBJECTIVES

At the end of the course, the students will be able to:

- understand the concept and scope of ontology and its role in knowledge management;
- get acquainted with various tools for ontology;
- be familiarized with different phases of ontology based knowledge management;
- know various case studies on ontology and evaluate them.

COURSE OUTLINE

Unit 1: Ontology: Scope, Role of ontologies in Knowledge Management – Architecture for semantic – based Knowledge Management – Tools for ontology – based Knowledge Management.

Unit 2: Ontology Languages: Introduction- OIL and DAML+OIL Semantic web pyramid of languages

Unit 3: Ontology based Knowledge Management: Introduction- Feasibility Study- Kick off phase-Refinement phase- Evaluation phase- Maintenance and Evolution phase.

Unit 4: Resource Description Framework: Introduction – RDF features. Ontology based knowledge management.

Unit 5: Case Studies

Suggested Readings

Antoniou, Grigoris & Harmelen, Frank Van (2004). *A Semantic Web Primer-Cooperative Information Systems*. USA: The MIT Press

Berners-Lee, Tim (2005) *Spinning the Semantic Web: Bringing the World Wide Web to Its Full Potential*. USA: The MIT Press

Davies (2003). *Towards the Semantic Web: Ontology-driven Knowledge Management*. New Jersey: John Wiley & Sons Ltd

- Davies, John (2006) *Semantic Web Technologies: Trends and Research in Ontology based Systems*. New Jersey: John Wiley & Sons Ltd
- Effingham, Nikk. (2013). *Introduction to Ontology*. United Kingdom: Polity Press. ISBN-13: 9780745652542
- Lacy, Lee W. (2005) *Owl: Representing Information Using the Web Ontology Language*. Trafford Publishing .
- Passin, Thomas B. (2004). *Explorer's Guide to the Semantic Web*. Manning Publications.
- Powers, Shelley (2003). *Practical RDF*. USA: O'Reilly Media.

LISC518 – Web Technology	3 Credits
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COURSE OBJECTIVES

At the end of the course, the students will be able to:

- explain the evolution of Internet and Web;
- understand various services of Internet and WWW;
- discuss the functions and features of the Web browsers and Search Engines; and
- differentiate the Websites based on the way they function and categorise them based on the content and the client it caters to.

COURSE OUTLINE

Unit 1: Web Technology – An Overview – Internet: History, Features, Services & Protocols – WWW: History, Features, Web Servers, Web Clients – Distributed Information System and Services – Web 2.0, Lib 2.0, Semantic Web, Cloud Computing.

Unit 2: Web Browsers and Services – History, Function, Features of Browsers (IE, Firefox, Chrome)

Unit 3: Mark-up Languages and Scripting Languages – Functions & Features of HTML, XML, DHTML, XHTML, CGI

Unit 4: Websites – Tools and Techniques; Types of Websites, Web contents, Static web contents, Dynamic Web Contents – MySQL, PostgreSQL.

Unit 5: Search Engines – Types, Features, Functions, Evaluation – Search Algorithms – Security Issues – Database Connectivity.

Suggested Readings

Dash, N. K., Mishra, S., Senthilnathan, S., & Misra, P. K. (2018). *Block 1: Communication Technology: Basics*.

Godbole, Achyut (2003). *Web Technologies: TCP/IP to Internet Application Architectures*. New Delhi: Tata McGraw-Hill Education

Huffman, K. (2017). Web 2.0: beyond the concept practical ways to implement RSS, podcasts, and Wikis. *Education Libraries*, 29(1), 12-19.

Kavanagh, M. J., & Johnson, R. D. (Eds.). (2017). *Human resource information systems: Basics, applications, and future directions*. Sage Publications.

Kumar, R. (2017). Application of Cloud Computing Technology in Libraries.

Pedley, Paul (2001). *The invisible Web: Searching the hidden parts of the Internet*. London: Aslib-IMI.

White, C. M. (2016). *Social media, crisis communication, and emergency management: Leveraging Web 2.0 technologies*. CRC press.

LISC519 – Marketing of Information Products & Services

3 Credits

COURSE OBJECTIVES

At the end of the course, the students will be able to:

- explain why information is a commodity? and further explain the role of information industry
- introduce the nature of information as a product, customers and profiling the information industry
- explain the importance of marketing to information organizations and in the information marketplace
- explore the nature of marketing and promotion of marketing orientation or the marketing concept in information intensive industry.
- introduces the marketing mix and different marketing strategies.
- explain the consumer behaviour and decision-making in organizational markets

COURSE OUTLINE

Unit 1: Information as a Resource - Economics of Information; Information as a product; The range of information products, customers, profiling the information industry, the marketing environment. Pricing Information products and Services.

Unit 2: Concept of Marketing – Marketing Mix; Kotler’s Four C’s; McCarthy’s Four P’s, Corporate Mission.

Unit 3: Marketing Research – Branding and Corporate Identity: Marketing Research: Market Segmentation and Targeting; Geographic and Demographic Segmentation; Behavioral and Psychographics Segmentation; User Behavior and Adoption.

Unit 4: Marketing Strategies and Planning – Nature and models of marketing strategy and planning; Situation audit and analysis; SWOT analysis, 7S framework, Boston Consulting Group Matrix, Ansoff's Growth Matrix, Product Life Cycle. Performance and Impact Analysis.

Unit 5: Trends in Marketing Library – Role of Social Media in Marketing of Information – Case Specific Strategies.

Suggested Readings:

Aaker, D. A., Kumar, V., Leone, R. P., & Day, G. S. (2016). *Marketing research*. Wiley Global Education.

Anderson A R. (1980). Advancing library marketing. *Journal of Library Administration*. 1(3), 17 – 32.

Armstrong, G., Kotler, P., Harker, M., & Brennan, R. (2015). *Marketing: an introduction*. Pearson Education.

Bellardo, T. & Waldhart, T J. (1977). Marketing products and services in academic libraries, *Libri*. 27(3), 181 – 194.

Berry J. (1979). The test of the marketplace. *Library Journal*. 104, 1605.

Chaddha, K. (2013). Marketing of Library and Information Products and Services: Using Services Marketing Mix. *Innovations in Services Marketing and Management: Strategies for Emerging Economies: Strategies for Emerging Economies*, 190.

Dragon, A C. (1979). Marketing the library. *Wilson library bulletin*. 53, 498 – 500.

Eisner, J. (1981). Beyond PR: Marketing for libraries. *A Library Journal Special Report*.

Ferguson, D. (1977). Marketing online services in the university. 15 – 23.

Islam, M. M., & Habiba, U. (2015). Use of social media in marketing of library and information services in Bangladesh. *DESIDOC Journal of Library & Information Technology*, 35(4).

Jain, A. K. (Ed.). (1999). *Marketing information products and services: a primer for librarians and information professionals*. IDRC.

Kelley E. J. (1965). *Marketing : Strategy and functions*. N J. Prentice Hall.

Kim, M. S., & Chang, W. K. (2015). A Study on the Research Trend of Library Marketing Promotion. *Journal of the Korean Society for information Management*, 32(1), 171-204.

Kotler, P. (1971). *Marketing decision making: A model building approach*. New York : Holt McDougal.

Kotler, P. (1975). *Marketing for non-profit organizations*. New Jersey : Prentice Hall..

Massey, M E. (1967) Marketing analysis and audience research for libraries. *Library Trends*. 24(3), 473 – 481.

Moulton, B. (1981). Marketing and Library cooperatives. *Wilson Library Bulletin*. 55, 347-352.

- Piercy, N., & Evans, M. (2014). *Managing marketing information (RLE marketing)* (Vol. 17). New York : Routledge.
- Rowley, J. (2016). *Information marketing*. Routledge.
- Rowley, J. (2016). *Information marketing*. Routledge.
- Seetharama. S. (Ed.). (1995). *Libraries and information centres as profit making organizations*. (DRTC Workshop. 9 – 11 Aug. 1995). Bangalore : DRTC Indian Statistical Institute.
- Wasserman, P. & Ford F T. (1980). Marketing and marketing research : What the library manager should learn. *Journal of library administration*. 1(1), 23 – 30.
- Weingand, Darlene E. (1984). *Marketing for information agencies*. New Jersey : Ablex Publishing.

FOURTH SEMESTER

LISC521 – Knowledge Management

4 Credits

COURSE OBJECTIVES

At the end of the course, the students will be able to:

- describe the concept of Knowledge Management
- apply complex theories and practice of knowledge and intellectual capital management
- apply theories to a wide range of scenarios;
- formulate action plans for knowledge intensive organisations;
- distinguish aspects of industrial era management that may be inappropriate for knowledge intensive organisations and provide alternatives;
- formulate a framework for thinking about knowledge intensive organisations;
- describe and work with intangibles.

COURSE OUTLINE

Unit 1: Knowledge Management: Concept and definitions – Need for Knowledge Management in the emerging and changing business environment – Understanding knowledge; Types of Knowledge – explicit and tacit Knowledge – Knowledge works - changing role of Library and Information Professionals.

Unit 2: Knowledge Creation and Capturing: Knowledge creation model – Capturing tacit knowledge

Unit 3: Knowledge Codification and Organization: Knowledge base - knowledge mapping, decision trees, decision tables, frames etc.

Unit 4: Tools and Techniques of Knowledge Management: Neural network, Data Mining.

Unit 5: Case studies

Suggested Readings

Argyris, C. (1977). Organizational Learning and Management Information Systems. *Accounting, Organizations and Society*, 2(2), 113-123.

Arthur, W. B. (1996). Increasing Returns and the New World of Business. *Harvard Business Review*, 74(4), 100-109.

Baatz, E.B. Making Brain Waves. *CIO*, 9(7), 23-29.

Barañano, A. M. (2001). What do managers know and what do they need to know?. *Journal of European Business Education*, 10(2), 1-26.

Bartlett, C.A. & Ghoshal, S. (1995). Changing the Role of the Top Management: Beyond Systems to People. *Harvard Business Review*, 132-142.

Brito, E., Pais, L., & dos Santos, N. R. (2017). Measurement invariance of the Knowledge Management Questionnaire in local authorities. *European Journal of Applied Business and Management*, 3(1).

Bikowitz, W. R. (2000). *Knowledge Management*. Delhi: PHI.

Birkett, B. (1995). *Knowledge Management*. *Chartered Accountants Journal of New Zealand*, 74(1), 14-18.

Boland, R.J. (1987). The In-formation of Information Systems. In R.J. Boland & R. Hirschheim (Eds.). *Critical Issues in Information Systems Research*. (pp. 363-379). Chichester: Wiley.

Candlin, D.B. & Wright, S. (1992). Managing the Introduction of Expert Systems. *International Journal of Operations & Production Management*, 12(1), 46-59.

Daft, R.L. & Weick, K.E. Toward a Model of Organizations as Interpretation Systems. *Academy of Management Review*, 9, 284-295.

- Davenport, T.H. (1994). Saving IT's Soul: Human-Centered Information Management. *Harvard Business Review*, 119-131.
- Davenport, T.H. (1995). Think Tank: The Future of Knowledge Management. *CIO*.
- Dragoon, A. (1995). Knowledge Management: Rx for Success. *CIO*, 8(18), 48-56.
- Due, R.T. (1995). The Knowledge Economy. *Information Systems Management*, 12(3), 76-78.
- Ford, N. (1989). From Information- to Knowledge-Management. *Journal of Information Science Principles & Practice*, 15(4, 5), 299-304.
- Garvin, D.A. (1994). Building a Learning Organization. *Business Credit*, 96(1), 19-28.
- Gopal, C. & Gagnon, J. (1995). Knowledge, Information, Learning and the IS Manager. *Computerworld (Leadership Series)*, 1(5), 1-7.
- Hamel, G. & Prahalad, C.K. (1994). *Competing for the Future*. Boston, MA: Harvard Business School Press.
- Hannabuss, S. (1987). Knowledge Management. *Library Management*, 8(5), 1-50.
- Harari, O. (1994) The Brain-based Organization. *Management Review*, 83(6), 57-60.
- Hildebrand, C. (1995). Information Mapping: Guiding Principles. *CIO*, 8(18), 60-64.
- Jarvenpaa, S. L. & Ives, B. (1994). The Global Network Organization of the Future. *Journal of Management Information Systems*, 10(4), 25-57.
- Kanter, R.M. (1984). *The Change Masters: Innovation & Entrepreneurship in the American Corporation*. New York: Simon & Schuster.
- Kerr, S. (1995). Creating the Boundary less Organization: The Radical Reconstruction of Organization Capabilities. *Planning Review*. (pp. 41-45).
- Manville, B. & Foote, N. (1996). Harvest your Workers' Knowledge. *Datamation*, 42(13), 78-80.
- Morgan, G. (1986). Toward Self-Organization: Organizations as Brains. In *Images of Organization* (pp. 77-110). Newbury Park, CA: Sage.
- Nonaka, I. (1994). The Dynamic Theory of Organizational Knowledge Creation. *Organization Science*, 5(1), 14-37.
- Nonaka, I. & Takeuchi, H. (1995). *The Knowledge-Creating Company*. New York: Oxford University Press.

Porter, M. E. (2011). *Competitive advantage of nations: creating and sustaining superior performance* (Vol. 2). Simon and Schuster.

Quinn, J.B. (1992). *Intelligent Enterprise: A Knowledge and Service Based Paradigm for Industry*. New York: Free Press.

Shen, S. (1987). Knowledge Management in Decision Support Systems. *Decision Support Systems*, 3(1), 1-11.

Strapko, W. (1990). Knowledge Management. *Software Magazine*, 10(13), 63-66.

Zeleny, M. (1987). Management Support Systems. *Human Systems Management*, 7(1), 59-70.

LISC522 - Electronic Resources Management	4 Credits
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COURSE OBJECTIVES

At the end of the course, the student will be able:

- To learn about selection, licensing, and evaluation of electronic resources.
- To enable to analyze the evolving relationships among publishers, vendors, and libraries.
- To critically examine the laws and policies that made an impact on electronic resource management.
- To understand the critical technologies and standards behind electronic resource management.
- To understand how licensing access to information, impact on libraries and information users, especially with regards to Copyright Law.

COURSE OUTLINE

Unit 1: Electronic Resources: Overview, concept, definition, evolution, need, characteristics, benefits and drawbacks – E-Resource life cycle.

Unit 2: Electronic Resource Management Systems (ERMS): Selecting, acquiring/ subscription/ purchasing, implementation, evaluation and renewing electronic resources/ cancellation. Consortia: Concept, need, purpose & limitations; E-ShodhSindhu: Consortium for Higher Education Electronic Resources. Techniques for Electronic Resource Management (TERMS), Strategic planning for ERM – Media and Format Migration.

Unit 3: Collection Development Process: Formulating policy, budgeting, evaluation of e-resources. Organization & description of resources. Metadata: requirements, types. User awareness and capacity building. Strategic planning for ERM, Electronic usage statistics, standards and guidelines (SUSHI – COUNTER) – LOCKS, CLOCKS

Unit 4: Web-based Resources: Scope, types and evaluation. Economics of E-resources – Pricing. Access management of E-resources: authentication and access management of e-resources. Subscription models: copyright, licenses and tactics and terms in the negotiation of e-resources licenses.

Unit 5: Recent Trends in ERM: Future of ERMS, hardware and software changes, user behaviour and expectations, disintegration of the ILS, intellectual property and perpetual access and archiving – Coral.

Suggested Readings

Anderson, E. K. (2014). *Chapter 2: Elements of Electronic Resource Management*. Retrieved 03 06, 2018, from World Wide Web: <https://journals.ala.org/index.php/ltr/article/view/4492/5257>

Brown, K. C. (2008). Tactics and Terms in the Negotiation of Electronic Resource Licenses. In H. Yu, & S. Breivold, *Electronic Resource Management in Libraries: Research and Practice* (pp. 174-193). Hershey: Information Science Reference (an imprint of IGI Global).

Chen, Xiaotian, et.al. “E-Resource Cataloging Practices: A Survey of Academic Libraries and Consortia.” *The Serials Librarian* 47, no. 1/2 (2004): 153–79.

Davis, T. L., & Feather, C. (2008). The Evolution of License Content. In H. Yu, & S. Breivold, *Electronic Resource Management in Libraries: Research and Practice* (pp. 122-144). Hershey: Information Science Reference (an imprint of IGI Global).

Doering, William and Chilton, Galadriel, “ERMes: Open Source Simplicity for Your E-Resource Management,” *Computers in Libraries* 29, no. 8 (2009): 20–24;

Doering, William and Chilton, Galadriel “A Locally Created ERM: How and Why We Did It,” *Computers in Libraries* 28, no. 8 (2008): 6–7, 46–48.

Donald Taylor, Frances Dodd, and James Murphy, “Open-Source Electronic Resource Management System: A Collaborative Implementation,” *Serials Librarian*, 58, no. 1–4 (2010): 61–72, doi: 10.1080/03615261003623039.

Ellingsen, M. (2004). Electronic Resource Management Systems. *LIBER QUARTERLY*, 14, 313-321.

Elsa K. Anderson. *Electronic Resource Management Systems: A Workflow Approach*. Library Technology Reports alatechsource.org April 2014. 10.1080/0361526X.2013.760414.

Emery, J., & Stone, G. (2013). *Techniques for Electronic Resource Management (Library Technology Reports)*. Chicago: Amer Library Assn.

- Fons, T. (2008). The Future of Electronic Resource Management Systems: Inside and Out. In H. Yu, & S. Breivold, *Electronic Resource Management in Libraries: Research and Practice* (pp. 363-373). Hershey: Information Science Reference (an imprint of IGI Global).
- Hawthorne, D. (2008). History of Electronic Resources. In H. Yu, & S. Breivold, *Electronic Resource Management in Libraries: Research and Practice* (pp. 1-15). Hershey: Information Science Reference (an imprint of IGI Global).
- Hogarth, M., & Bloom, V. (2008). Panorama of Electronic Resource Management Systems. In H. Yu, & S. Breivold, *Electronic Resource Management in Libraries: Research and Practice* (pp. 322-349). Hershey: Information Science Reference (an imprint of IGI Global).
- Holmberg, M., & Bothmann, B. (2008). Strategic Planning for Electronic Resource Management. In H. Yu, & S. Breivold, *Electronic Resource Management in Libraries: Research and Practice* (pp. 16-28). Hershey: Information Science Reference (an imprint of IGI Global).
- Howland, J. L., & Wright, T. C. (2006). Implementing an Electronic Resource Management System: Brigham Young University's Experience. *Library Hi Tech News*, 23(7), 28-31.
- Hults, P. (2008). Electronic Usage Statistics. In H. Yu, & S. Breivold, *Electronic Resource Management in Libraries: Research and Practice* (pp. 29-47). Hershey: Information Science Reference (an imprint of IGI Global).
- Imre, Andrea., Hartnett, Eric and Hiatt, C. Derrick . (2013). "CORAL: Implementing an Open-Source ERM System," *Serials Librarian* 64, no. 1(4), 224–234,
- Jennings, L. (2009). *Electronic resources management for electronic resources librarians: a bibliography*. Bath: University of Bath.
- Joshiyura, S. (2008). Selecting, Acquiring, and Renewing Electronic Resources. In H. Yu, & S. Breivold, *Electronic Resource Management in Libraries: Research and Practice* (pp. 48-70). Hershey: Information Science Reference (an imprint of IGI Global).
- Kate Silton and Tiffany LeMaistre, "Innovative Interfaces' Electronic Resources Management System: A Survey on the State of Implementation and Usage," *Serials Review* 37, no. 2 (June 2011): 82–83.
- Khater, Polly and Appleton, Betsy, "Using a Local Electronic Resource Management System to Manage E-Journals: Can It Get Any Better Than This?" *Serials Librarian* 58, no. 1–4 (2010): 250–256, doi: 10.1080/03615261003626016

- Koppel, T. (2008). In the Eye of the Storm: ERM Systems Guiding Libraries' Future. In H. Yu, & S. Breivold, *Electronic Resource Management in Libraries: Research and Practice* (pp. 374-382). Hershey: Information Science Reference (an imprint of IGI Global).
- Koppel, T. (2008). Standards, the Structural Underpinnings of Electronic Resource Management Systems. In H. Yu, & S. Breivold, *Electronic Resource Management in Libraries: Research and Practice* (pp. 295-305). Hershey: Information Science Reference (an imprint of IGI Global).
- Patra, N. K. (2014). *Electronic Resource Management: A Case Study of Management School Libraries In India*. Sampalpur: Sampalpur Univesity.
- Ramaiah, CK. (Editor). *Electronic Resources Management in Libraries: Felicitation Volume brought out in Honour of Dr Aragonda Lakshmana Moorthy*. New Delhi: Allied Publishers Pvt Ltd, 2013. ISBN: 978-81-8424-813-5.
- Robertson, N. D., Anderson, I., Chandler, A., Farb, S. E., Jewell, T., Parker, K., et al. (2002). *Entity Relationship Diagram for Electronic Resource*. Retrieved 03 07, 2018, from World Wide Web: <http://old.diglib.org/pubs/dlf102/dlfermi0408appc.pdf>
- Rodriguez, J. C., & Zhang, B. (2008). Authentication and Access Management of Electronic Resources. In E. R. Practice, *Holly Yu; Scott Breivold* (pp. 250-274). Hershey: Information Science Reference (an imprint of IGI Global).
- Sadeh, T., & Ellingsen, M. (2005). Electronic resource management systems: the need and the realization. *New Library World*, 106(5/6), 208-218.
- Sharon Whitfield, "Implementing CORAL: An Electronic Resource Management System," *Computers in Libraries* 31, no. 8 (October 2011): 18–22.
- Soules, A., & Ferullo, D. L. (2008). Copyright Implications for Electronic Resources. In H. Yu, & S. Breivold, *Electronic Resource Management in Libraries: Research and Practice* (pp. 145-173). Hershey: Information Science Reference (an imprint of IGI Global).
- The E-Resources Management Handbook. The ERMH is an open access publication on e-resource management. (ISBN: 0-9552448-0-3; 13-digit version: 978-0-9552448-0-3).
- Timothy D. Jewell et al., *Electronic Resource Management: Report of the DLF ERM Initiative* (Washington, DC: Digital Library Federation, 2004), 25, <http://old.diglib.org/pubs/dlf102>.
- Whitfield, S. (2011). Implementing CORAL: An electronic resource management system. *Computers in Libraries*, 31(8), 18-22.

Wilkinson, Frances C. and Linda K. Lewis. "Acquiring Electronic Resources." In *The Complete Guide to Acquisitions Management*, 137–61. Westport, Conn.: Libraries Unlimited, 2003

Zhang, Y. W. (2008). Challenges and Potentials of Electronic Resource Management. In H. Yu, & S. Breivold, *Electronic Resource Management in Libraries: Research and Practice* (pp. 306-321). Hershey: Information Science Reference (an imprint of IGI Global).

LISC523 – Project/Dissertation

4 Credits

M.L ib.I.Sc. (Master of Library and Information Science) students shall have to choose a topic for project / dissertation in the beginning of the 4th Semester under the guidance of a teacher. They have to submit the Dissertation on the selected topic.

SOFT CORE COURSES (ANY ONE)

LISC524 – Informetrics

3 Credits

COURSE OBJECTIVES

At the end of the course, the student will be able to:

- be familiar with the concept of bibliometrics, informetrics, scientometrics, webometrics and altmetrics
- carry out quantitative studies on various subject fields.
- get acquainted with the concept of citation analysis, different forms of citation, impact factor etc.
- apply qualitative as well as quantitative techniques in library and information science.

COURSE OUTLINE

Unit 1: Introduction: Concept, definition, need and historical overview and application of Informetrics, Librametrics, Bibliometrics, Scientometrics, Webometrics and Altmetrics

Unit 2: Classical Bibliometric Laws: Zipfs Law, Lotka's Law and Bradford's Law – Application of bibliometric laws.

Unit 3: Growth and Obsolescence of Literature: Various growth models

Unit 4: Citation Analysis: Definition, Citation indexing, including bibliographic coupling and co-citation analysis. Formulas for measuring Citations: H-index, Impact Factor, Immediacy index. Citation Indexing Databases and Services: Scopus, Google Scholar, web of Knowledge, others.

Unit 5: Mapping of Science: Journal – Journal, Authors, Citation – Mapping Indicators – Mapping & Data Analysis Tools – VOS Viewer, Pajek, Bibexcel, Histcite, etc.

Suggested Readings

Ahlgren, P., Persson, O., & Tijssen, R. (2013). Geographical distance in bibliometric relations within epistemic communities. *Scientometrics*, 95(2), 771-784.

AshwiniTiwari (2006.) *Bibliometrics, Informetrics and Scientometrics: Opening New Vistas of Information Science*. Jaipur: RBSA publishers.

Borgman, C. L., & Furner, J. (2002). Scholarly communication and bibliometrics. *Annual Review of Information Science and Technology* (Vol. 36, pp. 3-72).

De Bellis, Nicola. (2009). *Bibliometrics and citation analysis: From the Science Citation Index to cybermetrics*. Lanham, MD: Scarecrow Press.

De Solla Price, Derek J (1963). *Little Science, Big Science*. New York: Columbia University Press.

Devarajan.G, (1997). *Bibliometric Studies*. New delhi: Essess Publications.

Garfield, Eugene(1979). *Citation Indexing* . New York: John willey and Sons .

Gayatrimahapatra (2000). *Bibliometric studies*. New Delhi: Crest publishing House.

Gayatrimahapatra (2009). *Bibliometric studies in the Internet Era*. New Delhi: Indiana publishing House.

Gogoi Mrs, M., & Barooah, P. K. (2016). *Bibliometric analysis of Indian Journal of Chemistry, Section B to study the usage pattern of information in the field of Material Science*.

Jena, Kamal Lochan.(2012). *Modern Approach to Bibliometric Studies*. New Delhi: SSDN Publishers,

Kessler, M. M. (1963). Bibliographic coupling between scientific papers. *American Documentation*, 14(1), 10-25.

Kumar, S., & Jan, J. M. (2013). Mapping research collaborations in the business and management field in Malaysia, 1980–2010. *Scientometrics*, 97(3), 491-517.

Nicholas, D and Ritchie, M.(1978). *Literature and Bibliometrics*. London : Clive Bingley.

Panda, Bibhu Prasad (2012).A Model Bibliometric Stud. New Delhi: SSDN Publishers

RavichandaraRao, I. K. (1985).Qualitative Methods for Library and Information Science. New Delhi: Wiley Eastern.

Vinkler, P. (2010). Indicators are the essence of scientometrics and bibliometrics. Scientometrics, 85, 861-866.

LISC525 – E-Publishing	3 Credits
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COURSE OBJECTIVES

At the end of the course, the student should be able to:

- demonstrate the knowledge of the major design tools for e-publishing that are required for developing electronic documents;
- digitise and edit text, graphics, audio and video information;
- acquire authoring skills required for developing e-documents;
- be familiarized with the design and development principles and rules of e-publications.

COURSE OUTLINE

Unit 1: Desktop Publishing (DTP) – History, typography, methods of DTP, DTP software, other hardware and software required – Scanners, Digital cameras, Adobe InDesign.

Unit 2: Types of Documents – Periodicals, promotional, informational, stationary, instructional, and presentations. Layout and design principles, basic elements of popular DTP. Using DTP software – importing and positioning text, understanding typography, enhancing documents with graphics, tables, colours, indexes and tables of contents for large size publications; printing and publishing – proofing, Portable Document Format (.pdf), preflight, etc.

Unit 3: Image Editing – Images (analogue/digital), image processing, common image file formats in publishing - .jpg, .tif/.tiff, .psd, .ai; resolution – monitor, printer, scanner; colors management – RGB, CMYK; image manipulation, adjustment and correction tools and techniques, layering images, channels and masks, adding text, filters.

Unit 4: Web Publishing – Web design and layout concept differences – Head content and location, formatting text, images – file formats, size; enhancing for print vs. web, accessibility and navigation. Adding and configuring audio, creating play and stop buttons. Adding video – setting video playback options, placing video into a document. HTML overlays - adding local HTML content into an overlay – Author Publishing – Aggregator as model of E-Publishing.

Unit 5: Technological Trends – Multimedia publishing, DRM Technology and standards, Internet publishing law, ethics in publishing – copyright, privacy etc.

Suggested Textbook

Williams, Robin (2012). *The Non-Designer's InDesign Book*, Essential design techniques for print projects, Peachpit Press, Berkeley, CA. or Coursepack.

Additional Readings:

Adobe Systems (2013). *Adobe Creative Suite 6 Design & Web Premium: Classroom in a Book*. The official training workbook from Adobe Systems, Inc.

Adobe Systems (2012). *Adobe Photoshop CS6 Suite 6: Classroom in a Book*. The official training workbook from Adobe Systems, Inc.

Botello, Chris (2008). *Adobe InDesign or similar software CS3 Revealed*. Thomson Course Technology, a division of Thomson Learning, Inc.

Botello, Chris, & Reding, Elizabeth Eisner (2007). *Photoshop CS3 & Illustrator CS3*. Course Technology. ISBN: 978-1428319622.

Burns, Diane & Cohen, Sandee (2014). *Digital Publishing with Adobe InDesign CC: Moving Beyond Print to Digital* (1st ed.). Adobe Press. ISBN: 9780133930160.

Gabriel, Michael. (1989). *A guide to the literature of electronic publishing: CD-ROM, desktop publishing, and electronic mail, books and journals*, Conn. Jai Press.

Gorman, G.E. (Ed.). (2005). *Scholarly publishing in an electronic era*. London: Facet Pub.

Greenberger, Martin (1985). *Electronic publishing plus: media for a technological future*. White Plains, N.Y.: Knowledge Industry Publications.

Ramaiah, C.K. Foo, S., & Heng, P.C. (2006). *Trends in Electronic Publishing*. In Ching, H.S., Poon, P.W.T., & McNaught, C. (Eds.), *eLearning and Digital Publishing, Computer Supported Cooperative Work* (Vol. 33, pp. 111-132). Springer.

Sul H. Lee, (2007). *Print vs. digital: the future of coexistence*. Binghamton, NY: Haworth Information Press.

Susan E. L. Lake & Karen Bean, (2008). *Digital Desktop Publishing*. Thomson Press.

The Design Collection Revealed (Adobe InDesign or similar software CS3) (2008). Thomson Learning, Inc.

William Kasdorf (Ed.). (2003). The Columbia Guide to Digital Publishing. Columbia University Press. ISBN: 9780231124997

LISC526 – Intellectual Property Rights	3 Credits
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COURSE OBJECTIVES

At the end of the course, the student will be able to:

- understand the need and importance of ip.
- give a brief idea about ipr and related rights.
- learn about different organization working in ip in india and abroad
- analyze the legal issues, challenges and protection related to ip
- learn about the government initiatives and policies to protect ip

COURSE OUTLINE

Unit 1: Intellectual Property Rights: Concept, definition, purpose and functions of IPR, significance in the present scenario, some important examples of IPR, protection of IPR, genesis and development of IPR in India and abroad.

Unit 2: Different Types of IPR: Copyrights and related rights, Patents, Trade Marks, Industrial Designs, Geographical Indications, Traditional Knowledge, Plant Variety Protection, Biological Diversity, Protection of Integrated Circuits Layout Designs, Protection of Undisclosed Information.

Unit 3: Leading International Laws on IPR: Berne Convention, Universal Copyright Convention, Paris Convention, Patent Cooperation Treaty (PCT), Patent Law Treaty (PLT), GATT, WTO and TRIPS Agreement, Role of WIPO and UNESCO related to IPR.

Unit 4: Management of IP: IP Policies, Licensing, Legal issues, Commercialization of IPR, Initiatives of Government of India towards protection of IPR, Emerging Issues and Challenges of IPR in Internet age.

Unit 5: IPR in Digital Environment: Need and uses, electronic resources licensing, rules and laws governing IPR in India and abroad, its development and amendments – Plagiarism – DRM.

Suggested Textbooks

Intellectual Property Rights, United Nations Educational, Scientific and Cultural Organization, ISBN- 978-92-3-100081-2

Additional Readings

- Adukia, R.S. Handbook on Intellectual Property Rights in India.
- Aggarwal, R. (2017). Intellectual Property Rights Regime in India: Government Policies and Practices. Department of Industrial Policy and Promotion (Ministry of Commerce and Industry), Government of India.
- Ahuja, V.K. (2017). Law Relating to Intellectual Property Rights(3rded.). LexisNexis.
- Ahuja, V.K. (2015). Law of Copyright and Neighbouring Rights- National and International Perspectives (2nded.).LexisNexis.
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