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Curriculum Framework of Library and Information Science Education In the United States, the United Kingdom and India

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1. Introduction

The present study conducts the analysis of the courses offered by the school of library and information science in universities of the United States, the United Kingdom and India. This study also discusses the curriculum which is offered by the Master of Library and Information Science courses. Furthermore, the comparison of the core curriculum is made with the curriculum recommended by the American Library Association in United States, Chartered Institute of Library and Information Professionals (CILIP) in United Kingdom and University Grants Commission (UGC), India. The investigator has selected three universities from each country for study, which are University of North Carolina at Chapel Hill, Syracuse University and University of Washington from United States; Aberystwyth University, Manchester Metropolitan University and University College London from United Kingdom; Banaras Hindu University, Central University of Gujarat and Kashmir University from India. In India Universities which offers integrated Master's degree are selected to compare it with the curriculum which is recommended by UGC for integrated Master's degree in library and information science.

2. Review of related literature

The study conducted by Kamila (2008) analyses the influence of adopting Information Communication technology in curriculum of library and information science courses. She has also enumerated different challenges faced in incorporating ICT into the curriculum. Singh and Shahid (2010) stressed on the need for changing the LIS curricula and also discussed the efforts taken for changing it. They discussed the role of national committees organised by University Grants Commission in updating the LIS curricula in India. Bailey (2010) in his study analyses the curriculum of academic librarianship and compared it with the ACRLog list. ACR Log list comprises of the subjects which according to readers should be covered in the curriculum. On comparison it is found that most of the subjects were covered in the curriculum. In their study Suboohi and Walia (2013) compared the curriculum of post-graduate LIS courses of ten departments of both India and the United Kingdom. They covered the different aspects including nomenclature, teaching methods and number of papers offered. In their study Matusiak; stansbury and Barczyk (2014) have discussed about the ALA's core competencies of LIS curriculum in the United States. They also analysed the impact of information and communication technology on Library and information science education and also discussed ALA accreditation process.

3. The United States

3.1. University of North Carolina at Chapel Hill

3.1.1. School of Information and Library Science (SILS)

Dr Louis Round Wilson (the than University Librarian) started summer school classes in1904 at University of North Carolina. The school of library science was opened in 1931 at UNC and admitted 37 students as well as appointed five faculty members. The school was provided grant of $100,000 by Carnegie Corporation for availing operation for three years and making its accreditation by ALA from conditional to permanent. The school accredited as Graduate school of library science by the Board of Education for Librarianship of the ALA in 1932 and later also get accreditation for undergraduate. In 1941 the library program Bachelor of Arts in Library science was changed to Bachelor of Science in Library Science. Master of School librarianship program was approved in 1947 and the program was started after three years. Another program for degree of Master of Science was approved in 1951 and started two years later. The doctoral degree in the school was first awarded in 1980 to John Ann Hardison Bell. Two important developments taken place in 1988 including the renaming of school as School of Information and Library Science and also starting of the new program "Post-Graduate Certificate of Advanced Study" (CAS) degree (School of Information and Library Science, 2020).

3.1.2 Courses Offered

➤ **Master of Science in Library Science (MSLS)**

The students are required to complete the SILS Information Technology Competency requirement before starting the first semester of MSLS. They also have to complete the 48 semester hours of graduate level coursework which comprises of 22.5 hours of required course and 25.5 of elective courses. This course also requires satisfactory completion of examination along with a master's paper or project.

Required Core Courses

- ➤ Human Information Interactions
- ➤ Information Resources and Services
- ➤ Resource Selection and Evaluation
- ➤ Organisation of Information

- ➢ Overview of Research Methods
- ➢ Management for Information Professionals
- ➢ Proposal Preparations and Presentation
- ➢ Master's paper

➢ **Dual Master's Degree**

There is also provision of dual Bachelor's and Master's program through which students can earn dual degree of Bachelor of Science in Information science and Master of Science in Information or Master of Science in Library Science.

➢ **Master's in Digital Curation and Management**

To earn the degree of Professional Science Master's in Digital Curation and Management, students have to complete the intensive digital curation coursework, an internship and training of business and professional skills. The coursework comprises of eight required courses of 19 credits, four electives among which students have to select three courses of 4.5 credits and five business fundamentals and professional skills courses of 7.5 credits. This course requires a total of 31 credits.

➢ **Graduate Certificate**

Graduate Certificate program develops skills of students on particular areas. SILS provides certificate programs in Bioinformatics, Clinical Information Science, Digital Curation, Digital Humanities, Interdisciplinary Health Communication, International Development, Non-Profit Leadership, Public Health Informatics.

➢ **Post Master's Certificate in Digital Curation**

This program provides skills to professionals to regulate the policies and standards for digital collections and data management in different organizations like libraries, museums, archives and government agencies. It requires to complete ten courses of 30 credits which focus specially on Data Curation.

➢ **Ph.D. in Information and Library Science**

The doctoral program requires completion of coursework which is followed by the 18 hour review by the committee chaired by the advisor of the student and comprises of other faculty

members who have taught the student. Yearly reviews are also conducted in which students has to prepare progress report at the end of each academic year. Full time students have to complete the coursework within a period of two and a half year and within this period they should present two papers that were submitted for publication and should conduct literature review of their area of interest. The doctoral program requires completing the minimum of 36 credits and two required courses INLS 881 and INLS 882 (Research Issues and Questions I and II) should be taken in consecutive semesters. After completing the requirements of the coursework, written and oral examination is conducted. A final presentation which is open to university and also has at least one external examiner is required after completion of doctoral dissertation in which students has to defend his research.

> **Dual Degree Program**

The UNC's School of Information and Library science in collaboration with other schools of UNC and North Carolina State University offers dual degree program to students. This program helps students in maximizing learning and minimizing overlap of content and provides dual degree in lesser duration. Students can earn the degree of MSIS or MSLIS and one degree from Art History, Business administration, Government, Health Policy, Law, Nursing and Public History.

Other programs offered at SILS are Carolina Health Informatics Program, Evidence Based Medicine, Minor in Information Systems, Environmental Informatics Dual Degree, Concentration in Archives and Records Management, School Library Media Coordinator Program, Bachelor of Science in Information Science (BSIS), Master of Science in Information Science (MSIS)

3.2 Syracuse University

3.2.1 School of Information Studies

The first library science course in Syracuse University was started in 1896 at Von Ranke library of the University and school of library science was established in 1915. This school was renamed in 1974 as the School of Information Studies and included broader field of

information. Master of Science in Information Resources Management now named as Information Management was started in 1980 and in 1987 started a Bachelor's program in Information Management and Technology. In distance mode Master's program in library science was started in 1993 by the Information school. The first Massive Open Online Course (MOOC) was offered in 2013 on "An introduction to Data Science" at the ischool of the University (School of Information Studies, 2020).

3.2.2 Courses Offered

➢ **MS in Library and Information Science**

This program is accredited by ALA since 1928. It has the aim to change the use of library and information resources by the organisation for the better. It offers the following required core courses:

Required Core Courses

➢ Introduction to the Library and Information Profession
➢ Reference and Information Literary Services
➢ Library, Planning, Marketing and Assessment
➢ Information Resources: Organisation and Access
➢ Management Principles for Information Professionals
➢ Information Policy

3.2.3 Other Courses

➢ **BS in information management and technology**

This program trains students on human side of information technology. This program helps students learn about value of information and technology, learn to acquire and locate information and also to identify the need of information users.

➢ **Certificate of Advanced Study**

Certificate of advanced study enhances the skills of students and augments the education of students at graduate level. School of Information Studies offers CAS in different areas like- CAS in Data Science, CAS in e-Government, CAS in Enterprise Technology Leadership, CAS in Information Security Management, CAS in Information Technology Management, CAS in School Media, LeMoyne Partnership.

➢ **MS in Library and Information Science: School Media**

School of Information Studies also offers MS in Library and Information Science with Specialisation in School Media. This program requires 36 credits and completes in 2 years. In addition to core courses of MSLIS this program also offers other courses named Accessible Library and Information Services, Information Technologies in Educational Organisations, Youth Services in Libraries and Information Centres, Motivating 21st Century Learning in School Libraries and Literacy through School libraries. It also requires completing a fieldwork of 100 hours in elementary and secondary school libraries out of which 15 hours must be with students with special needs. Students also have to complete the school media practicum at elementary and secondary libraries.

➢ **Fast Track Mode for Master's Degrees**

In fast track mode students start taking classes of graduate course at the final year of the under-graduate program. After completing the under-graduate program students can continue the graduate level program either online or at campus. There are three parts of fast track mode: Undergraduate, Summer Classes, and Graduate Studies. At undergraduate level students complete 9 credits of graduate degree, during summer classes acquire additional credits and then during full-time graduate study can complete the course within a year. Students who get a job offer can also complete their degree by part-time study.

➢ **Ph.D. in Information Science and Technology**

The doctoral program comprises of 78 credits and it is a campus - based program. The Ph.D. students receive funding for the research. Doctoral students identify the faculty members who have the same research areas which they have. The main research areas of faculty members includes- Data Science and Computation, Computational Social Science, Human-Centred Computing and Design, Information Systems, Libraries and Librarianship, Learning and Training, Organisations, Collaboration and Leadership, Security and Privacy, Digital Technologies and Society, Telecommunications and Networking.

3.3 University of Washington

3.3.1 The Information School

The ischool at the University of Washington was established by Harriet Howe, Josephine Meissner, William E. Henry and Charles W. Smith in 1911. After realising the need of well-

trained librarians in the western United States, Howe and her colleagues established the department of Library economy in the college of Liberal Arts. Librarians were trained through six week summer course offered at University of Washington before establishment of this school. The department of library economy was the first department accredited by American Library Association in 1926 when ALA started accrediting library programs and also reviewed and accepted 12 programs of other Universities. The library school become the Department of Library science in the Graduate School. Later in 1935 it was renamed as school of librarianship. The school of librarianship started a new master's degree program of 1 year duration in 1951. Other special courses including "Special Topics in Librarianship: Aspects of Publishing, Special Librarianship, Information System Design, Archives Seminar, International and Comparative Librarianship and Municipal and County Libraries and Library Systems" were added in 1971. Librarianship 497 course was introduced for providing information about basics of computer. In the year 1979 University of Washington started offering two year master's degree program. The ischool again renamed in 1983 from school of librarianship to the Graduate school of Library and Information Science. The school further renamed in 2001 as the Information School or the ischool (The Information School, 2020).

3.3.2 Courses Offered

> **Informatics**

The students can also opt for course on informatics in which different specialisations are available which includes Data Science, Human Computer Interaction, Information Architecture, Information Assurance and Cyber Security, and student designed Concentration.

> **Master of Library and Information Science**

This course helps students to develop professional experiences for different organisations and companies. It comprises of three elements: Core Courses, Electives and a Degree Project has 63 quarter credits. Requirements for course are same for both residential and online MLIS programs. The core curriculum of the course is designed by world class faculty to develop a foundation in library and information science field along with developing skills to store, organise, search and use information and also provides information about important technological, policy, pedagogical, research, management and design concepts.

Required Courses

- Information Resources, Services and Collections
- Research Assessments and Design
- Information Behaviour or Design Methods for Librarianship
- Organisation of Information and Resources
- Management of Information Organisations

- **Master of Science in Information Management (MSIM)**

In MSIM students acquire skills to analyse and to solve information related problems. They can specialize in data science and information security.

- **Ph.D. in Information Science**

The Ph.D. degree in information science can be obtained by completing the three components- Coursework, Practica and Dissertation. The coursework enables the student to think like an information scientist and helps him to develop foundation for the dissertation. Faculty Seminar, Theoretical Foundations for Information Science, Research Design, Quantitative Methods in Information Science, Qualitative Methods in Information Science, Design Inquiry and Methods in Information Science are required for coursework.

The required practical courses for Ph.D. are Teaching Practicum I, Teaching Practicum II, Research Practicum I, Research Practicum II. Students also have to choose additional elective coursework in consultation with their advisor.

3.4 ALA's Core Competencies

ALA's Core Competencies of Librarianship was approved and adopted as policy by ALA Council in January 2009. The core competencies are the knowledge areas which should be acquired by the graduate from ALA accredited master's program. These competencies are:

- Foundation of the Profession
- Information Resources
- Organization of Recorded Knowledge and Information
- Technological Knowledge and Skills

- ➢ Reference and User Services

- ➢ Research

- ➢ Continuing Education and Lifelong Learning

- ➢ Administration and Management   (American Library Association, 2009).

3.5 ALA' Core competencies match with Curriculum

Syracuse University covers four ALA's Core Competencies including Foundation of the Profession, Information Resources, Reference and User Services, Administration and Management. In administration and management core, Syracuse University offers three subjects they are Management Principles for Information Professionals; Information Policy; Library Planning, Marketing and Assessment.

Students choose electives from the graduate courses offered at the ischool. The electives should be comprised of 15 credits. The electives can also be chosen from Information Management Program. The courses which are not LIS focused are advised to select with the consultation of the faculty advisor of the concerned student so that, he or she can select appropriate courses. There are 38 electives available for choice.

Students have to opt for Internship in Information Studies or Independent Readings and Research. They have to complete the internship of 150 hours of work onsite. Internship can be done locally at Syracuse University or nationally or even internationally. Most of the students opt for internship even after having prior library work experience but they can also choose to do a project as an independent research.

Table 1 Curriculum of Syracuse University

S. No.	ALA's Core Competencies	Syracuse University
1.	Foundation of the Profession	➢ Introduction to Library and Information profession
2.	Information Resources	➢ Information Resources: Organisation and Access
3.	Reference and User Services	➢ Reference and Information Literary Services

4.	Administration and Management	➢ Management Principles for Information Professionals ➢ Information Policy ➢ Library, Planning, Marketing and Assessment

The University of Washington offers Core Competencies from ALA which includes Information Resources; Organization of recorded Knowledge and Information; Reference and User Services; Research; and Administration and Management. The department offers electives from Society Core or Information Technology Core. In the second year Capstone I Project Planning and Capstone II Project Planning are available for study along with electives including Society or Information Technology Core. The fourth quarter in both first and second year is optional with limited elective course offerings.

Table-2 Curriculum of University of Washington

S. No.	ALA's Core Competencies	University of Washington
1.	Information Resources	➢ Information Resources, Services and Collections
2.	Organization of Recorded Knowledge and Information	➢ Organisation of Information and Resources
3.	Reference and User Services	➢ Information Behaviour
4.	Research	➢ Research Assessments and Design
5.	Administration and Management	➢ Management of Information Organisations

The University of North Carolina at Chapel Hill covers required cores from ALA's recommended core are Information resources; Organization of recorded knowledge and

Information; Reference and User Services; Research; and Administration and Management. Students may select courses for specializations by consulting their advisors and as per their interest among the courses including Academic Libraries, Adult Services in Public Libraries, Archives and Records Management, Children and Youth Services, Digital Libraries, Organisation of Information and Materials, Reference, School Library Media Coordinator, Special Libraries and Knowledge Management.

Table-3 Curriculum of University of North Carolina at Chapel Hill

S.No.	ALA's Core Competencies	University of North Carolina at Chapel Hill
1.	Information Resources	➢ Information Resources and Services ➢ Resource Selection and Evaluation
2.	Organization of Recorded Knowledge and Information	➢ Organisation of Information
3.	Reference and User Services	➢ Human Information Interaction
4.	Research	➢ Overview of Research Methods ➢ Proposal Preparations and Presentation
5.	Administration and Management	➢ Management for Information Professionals

4. The United Kingdom

4.1 University College London

4.1.1 Department of Information Studies

The department of Information studies is an international centre for education on different fields including information science, librarianship, archives and records management, digital humanities and publishing (University College London, 2020).

4.1.2 Courses Offered

> **MA in Library and Information Studies**

This program provides students the skill required library professionals to work efficiently. It is of one year duration by full-time study. This course takes two years by part-time study and can be completed in five years.

Required Core Courses

Cataloguing and Classification

Managing Collections

Supporting Information Users

Managing Information Organisations

Using Technology in Information Organisations

The Library and Information Professional

4.1.3 Other Courses

> **MA in Archives and Record Management**

This course develops skills among students for managing and preserving the new created records and also which are inherited from past. This course is of one year duration through full time study and two years duration through part- time.

> **MA and MSc in Digital Humanities**
> This program is introduced to study the changes which computational techniques has brought on archives, libraries, museums, cultural heritage and information sector and develops skills as per the need of employers and students expectations.

> **MSc in Knowledge, Information and Data Science**
> This program is designed for in-depth study of modern approaches to information science, data science methods and future trends of artificial intelligence.

> **MA in publishing**
> This program provides necessary skills required to become a publisher.

4.2 Aberystwyth University

4.2.1 Department of Information Studies

The department has a history of more than fifty years and providing education through distance mode from thirty years. The department offers courses in Libraries, Archives and Museums, Computer and Information Sciences, Digital Information and Media Management (Aberystwyth University, 2020).

4.2.2 Courses Offered

➢ **MA Information and Library Studies**

This program provides necessary skills which the companies and organisations are requiring now a day. It is of one year's duration.

Required Core Courses

Collection Management

Information Organisation and Retrieval

Information Services: Planning for Delivery

Information and Society

Studies in Management

4.2.3 Other Courses Offered

The department offers different courses at Undergraduate, Post- Graduate and at Doctoral Level. The courses included are- B.Sc. in Computer and Information Sciences, B.A. in Cultural Heritage: Libraries, Archives and Museums, B.Sc. in Information Management, Information and Library Studies. In addition to it, also offers joint degrees B.A. in Information Studies and History, B.A. in Information Studies and Media. Post -Graduate courses also offered including M.A. in Archives and Records Management, M.Sc. Digital Information and Information Management.

4.3 Manchester Metropolitan University

4.3.1 Department of Journalism, Information and Communications

This department was established in 1946 and was named as Manchester Library School. The department provides education in fields including library and information management, web development, communications and multimedia journalism and digital media.

4.3.2 Courses Offered

➢ **M.A./P.G. Diploma in Library and Information Management**

This program provides skills for organisation, accessibility and management of information and also about management of information organisations.

Required Core Courses

Evidence Bases in Library and Information Science

Research Methods

Digital Rights

Assessing Information Seeking Behaviour

Dissertation

Information Organisations and their Management

Information Organisation and Search

4.3.3 Other Courses

The department also offers courses at the undergraduate and post-graduate level in Multimedia Journalism including B.Sc. in Digital Media and Communications, B.A. and M.A. in Multimedia Journalism.

4.4 Chartered Institute of Library and Information Professional's Professional Knowledge and Skills Base

The CILIP accredited programs are assessed on the basis of Professional Knowledge and Skills Base. The PKSB comprises of:

(Chartered Institute of Library and Information Professionals, 2020)

Professional Expertise

- ➤ Organising Knowledge and Information

- ➤ Knowledge and Information Management

- ➤ Using and exploiting Knowledge and Information

- ➤ Research Skills

- ➤ Information Governance and Compliance

- ➤ Records Management and Archiving

- ➤ Collection Management and Development

- ➤ Literacies and Learning

Generic Skills

- ➤ Leadership and Advocacy

> ➤ Strategy, Planning and Management

> ➤ Customer Focus, Service Design and Marketing

> ➤ IT and Communication

4.5 CILIP's PKSB match with Curriculum

Table:4 Curriculum of The University College London

S. No.	Professional Knowledge & Skills Base	University College London
1.	Organising Knowledge and Information	Cataloguing and Classification
2.	Collection Management and Development	Managing Collections
3.	Leadership and Advocacy	The Library and Information Professional
4.	Strategy, Planning and Management	Managing Information Organisations
5.	Customer Focus, Service Design and Marketing	Supporting Information Users
6.	IT and Communication	Using Technology in Information Organisations

The University College London is offering six core courses and covering all the generic skills mentioned in the CILIP's Professional Knowledge and skills base. The department also offers various electives. Students can choose any two from Academic and Journals Publishing, Collections Care, Database Systems analysis and Design, Digital Resources in the Humanities, Electronic Publishing, Historical Bibliography, Information Literacy, Information Governance, Individual Approved Study, Knowledge Representation and Semantic Technologies, Manuscript Studies, Organizing Knowledge, Web Publishing.

Table: 5 Curriculum of the Aberystwyth University

S. No.	Professional Knowledge and Skills Base	Aberystwyth University
1.	Organising Knowledge and Information	Information Organisation and Retrieval
2.	Collection Management and Development	Collection Management
3.	Customer Focus, Service Design and Marketing	Information Services: Planning for Delivery
4.	Literacies and Learning	Information and Society
5.	Strategy, Planning and Management	Studies in Management

Aberystwyth University is offering five core courses and also offering electives which are Digital Information Literacy, Digital Information: Management for Access and Preservation, Rare Books and Special Collections, Records and Information Governance. Students also have to complete the dissertation.

Table: 6 Curriculum of the Manchester Metropolitan University

S. No.	Professional Knowledge & Skills Base	Manchester Metropolitan University
	Organising Knowledge and Information	Information Organisation and Search
	Research Skills	Research Methods Evidence Bases in Library and Information Science
	Information Governance and Compliance	Digital Rights
	Collection Management and Development	Information Organisations and their Management
	Customer Focus, Service Design and Marketing	Assessing Information Seeking Behaviour

Manchester Metropolitan University is offering six elective courses and are mostly from professional expertise mentioned in PKSB. The department also offering electives in Introduction to Health Librarianship, E-Learning and the Organisation

5. India

5.1 Banaras Hindu University

5.1.1 Department of Library and Information Science

The Library and Information Science department of BBAU was established in 1941. This department was the second to start diploma in Librarianship in 1942. This degree program after some modifications was converted into Bachelor's degree course in 1961 and later discontinued. The department offers M.L.I.Sc., PG Diploma in Manuscriptology and Ph.D. in Library and Information Science (Banaras Hindu University, 2020).

5.1.2 Course Offered

> **Master of Library and Information Science**

This course provides basic understanding of the principles of librarianship. This course also trains students for utilizing Information Technology in different services of libraries and information centres. The duration of the course is two years with four semesters.

Required Core Courses

Foundations of Library and Information Science

Computer Basics and Applications

Knowledge Organisation- Library Classification and Cataloguing Theory

Knowledge Organisation- Library Classification and Cataloguing I Practice

Library Management

Computer Applications (Practical)

Information Sources and Services

Knowledge Organisation- Library Classification and Cataloguing II Practical

Universe of Knowledge and Research Methods

Information Retrieval (Theory)

Information Retrieval (Practice)

Information Technology and System Design

Information Science and Knowledge Management

Information Users and Needs

Information Technology Applications (Practical)

5.1.3 Other Courses

> **PG Diploma in Manuscriptology**

This program provides the skills of perseveration, conservation and use of manuscrpits.

> **Ph.D.**

The Ph.D. program was initiated in the department in 1980.

5.2 Central University of Gujarat

5.2.1 School of Library and Information Science

The school of Library and information science is established by the Central University of Gujarat after realising the need for information handling. Master of Library and Information science programme was started to cater the information needs of library and information professionals.

5.2.2 Courses Offered

> **Master of Library and Information Science**

This program trains the graduates to manage knowledge and information and develops different skills regarding it, like collecting, organizing and disseminating knowledge for social, economic and technological development. This program is of two years duration.

Required Core Courses

Knowledge Society

Knowledge Organization I: Classification (Theory & Practice)

Knowledge Processing I: Cataloguing (Theory & Practice)

Information Sources and Services

Information Communication Technology (Theory & Practice)

Management of Libraries and Information Centres

Information Storage and Retrieval

Knowledge Organisation II: Classification (Theory & Practice)

Knowledge Processing II: Cataloguing (Theory & practice)

Library Automation (Theory & Practice)

Research Methodology

Digital Libraries (Theory)

Web Technologies and Web-based Information Management (Theory & Practice)

Digital Libraries (Practice)

Library Internship

Knowledge Management

Informetrics and Scientometrics

5.2.3 Other Courses

> **Post Graduate Diploma in Digital Library and Information Management**

This program is designed for library professionals who are interested in Digital Library Management. The mode of providing education is blended i.e. both online and contact classes are offered. This course is one year duration.

> **Ph.D. in Library and Information Science**

This program develops the research skills among students. The course covers different areas including Information literacy, new dimensions of LIS education, Information seeking

behaviour, Informatrics, Webometrics and other library and information science related courses.

5.3 Kashmir University

5.3.1 Department of Library and Information Science

The department of library and information science was established in 1970. The department has integrated technology with the curriculum to impart innovative knowledge and skills among students.

5.3.2 Courses Offered

> **Master's Programme in Library and Information Science**

The department offers master's programme in Library and Information Science of two years duration.

Required Core Courses

Foundations of Library and Information Science

Knowledge Organisation & Discovery (Theory & Practice)

Library Operations

Library Management

Knowledge Representation and Discovery (Theory & Practice)

Information Sources

Information Retrieval

Information Technology (Practice)

Information Systems & Services

Research Methods and Tools

Library Automation and Networking (Theory)

Library Automation and Networking (Practice)

Other Courses

The department also offers M.Phil. and Ph.D. in Library and Information Science.

5.4 University Grants Curriculum's Model Curriculum

The University grants curriculum has recommended the model curriculum in 2001, its modules are given below: (University Grants Commission, 2001):

- ➢ Foundations of Library and Information Science

- ➢ Knowledge Organisation, information processing and retrieval (Theory)

- ➢ Knowledge organisation, information processing and retrieval (Practice)

- ➢ Information Technology: Basics (Theory and Practice)

- ➢ Management of Library and Information Centres/Institutions

- ➢ Information Sources and Services (Theory)

- ➢ Information Sources and Services (Practice)

- ➢ Library and Users (Theory and Practice)

- ➢ Information and Communication

- ➢ Information Analysis, Repackaging and Consolidation

- ➢ Information Retrieval (Theory and Practice)

- ➢ Research Methods and Statistical Techniques

- ➢ Information Technology Applications

- ➢ Information Technology Applications (Practice)

- ➢ Electives: Information System

Table:7 Curriculum of Banaras Hindu University

S.No.	UGC Model Curriculum	Banaras Hindu University
1.	Foundations of Library and Information Science	Foundations of Library and Information Science

2.	Knowledge Organisation, information processing and retrieval (Theory)	Knowledge Organisation- Library Classification and Cataloguing (Theory)
3.	Knowledge organisation, information processing and retrieval (Practice)	Knowledge Organisation- Library Classification and Cataloguing I (Practice) Knowledge Organisation- Library Classification and Cataloguing II Practical
4.	Information Technology: Basics (Theory and Practice)	Computer Basics and Application
5.	Management of Library and Information Centres/Institutions	Library Management
6. 7.	Information Sources and Services (Theory) Information Sources and Services (Practice)	Information Sources and Services
8.	Library and Users (Theory and Practice)	Information Users and Needs
9.	Information and Communication	Information Science and Knowledge Management
10.	Information Retrieval (Theory and Practice)	Information Retrieval (Theory) & Information Retrieval (Practice) (Two papers)
11.	Research Methods and Statistical Techniques	Universe of Knowledge and Research Methods
12.	Information Technology Applications	Information Technology and System Design

13.	Information Technology Applications (Practice)	Computer Applications (Practical) Information Technology Applications (Practical)

Banaras Hindu University is covering most of the modules recommended by the UGC's Model Curriculum.

Table: 8 Currriculum of Central University of Gujarat

S.No.	UGC Model Curriculum	Central University of Gujarat
1. 2.	Knowledge Organisation, information processing and retrieval (Theory) Knowledge organisation, information processing and retrieval (Practice)	Knowledge Organization I: Classification (Theory & Practice) Knowledge Processing I: Cataloguing (Theory & Practice) Knowledge Organisation II: Classification (Theory & Practice) Knowledge Processing II: Cataloguing (Theory & practice)
3.	Information Technology: Basics (Theory and Practice)	Information Communication Technology (Theory & Practice)

4.	Management of Library and Information Centres/Institutions	Management of Libraries and Information Centres
5.	Information Sources and Services (Theory)	Information Sources and Services
6.	Information Sources and Services (Practice)	
7.	Information and Communication	Knowledge Management Knowledge Society
8.	Information Retrieval (Theory and Practice)	Information Storage and Retrieval
9.	Research Methods and Statistical Techniques	Research Methodology Informetrics and Scientometrics
10.	Information Technology Applications	Library Automation (Theory & Practice) Digital Libraries (Theory)
11.	Information Technology Applications (Practice)	Digital Libraries (Practice) Web Technologies and Web-based Information Management (Theory & Practice)

The department is covering most of the papers recommended by the UGC and has offering two papers of each of Library Classification and Cataloguing (Theory and Practice). The department is offering electives from Social Science Information Systems, Community Information Systems, Science Information Systems, Agricultural Information Systems, Health Information Systems. Students also have to submit dissertation for the Master's degree.

Table: 9 Curriculum of Kashmir University

S.No.	UGC Model Curriculum	Kashmir University
1.	Foundations of Library and Information Science	Foundations of Library and Information Science
2.	Knowledge Organisation, information processing and retrieval (Theory) Knowledge organisation, information processing and retrieval (Practice)	Knowledge Organisation & Discovery (Theory & Practice) Knowledge Representation and Discovery (Theory & Practice)
3.	Information Technology: Basics (Theory and Practice)	Information Technology (Practice)
4.	Management of Library and Information Centres/Institutions	Library Management Library Operations
5.	Information Sources and Services (Theory)	Information Sources
6.	Information Sources and Services (Practice)	Information Systems & Services
7.	Information Retrieval (Theory and Practice)	Information Retrieval
8.	Research Methods and Statistical Techniques	Research Methods and Tools
9.	Information Technology Applications	Library Automation and Networking (Theory)
10.	Information Technology Applications (Practice)	Library Automation and Networking (Practice)
	Electives: Information Systems	

The library and information science department of this University is offering several core courses from UGC core modules. In addition to core courses there are also many electives offered by the department in all the semesters.

6   Conclusion

Library and information science education was first started in the United States. Now, library and information science education is well established in the United States. Library and Information science education is offered at different levels including certificate, bachelors, masters and doctoral. It offers specialization in different fields including Academic Libraries, Adult Services in Public Libraries, Archives and Records Management, Children and Youth Services, Digital Libraries, Organisation of Information and Materials, Reference, School Library Media Coordinator, Special Libraries and Knowledge Management and many other. The library and information science schools also offer dual degree programs which provide two degree simultaneously in comparatively lesser duration. Fast track mode also minimises the duration of the program. In the United States ALA provide accreditation to the master's courses in LIS and provide a framework of Core LIS Courses to follow. The universities under study are following most of the core courses recommended by ALA. The accreditation provides uniformity and quality to the education. Hence, India should also accredit its courses to provide uniformity across the country. It will also improve the quality of library and information science education in India.

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