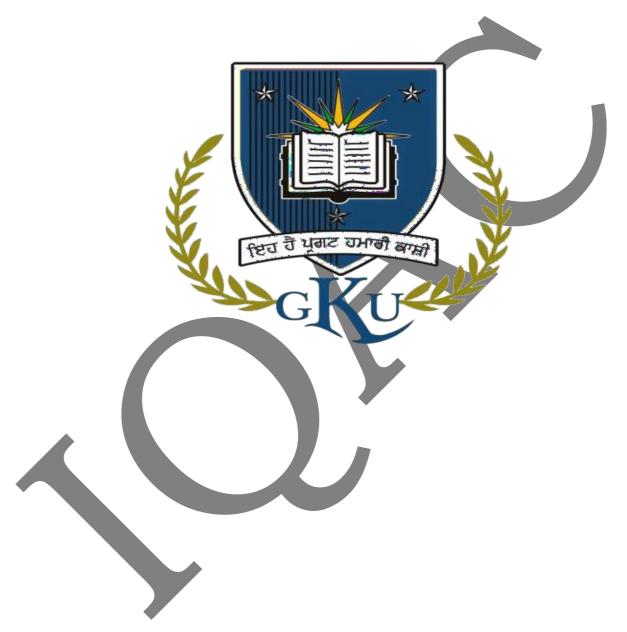# GURU KASHI UNIVERSITY

Master of Library and Information Science

Session: 2024-25

Department of Library and Information Science

GRADUATE OUTCOMES OF THE PROGRAMME
This program focuses on understanding the lifecycle and value of information for societal development. It equips students with skills for information management, the ability to assess user needs in various contexts, the capacity to provide digital literacy and information services, and the competence to contribute to the knowledge economy in diverse cultural settings, both locally and globally.

PROGRAMME LEARNING OUTCOMES: After completing the programme, the learner will be able to:

1. Demonstrate comprehensive knowledge and understanding of major concepts, principles, theories and laws of Library and Information Science.

2. Think critically for solving various problems pertaining to the management of libraries and information centers and their services.

3. Systematically analyze subjects of documents to classify them properly, and to assign subject headings for quality access to information resources.

4. Understand and classify simple, compound and complex subjects using standard classification systems; describe bibliographically all types of documents using coeval metadata standards.

5. Demonstrate the ability to identify ethical issues of library profession in providing library and Information services.

6. Understand the concepts of information and communication technology applications to libraries and information centers for processing and accessing information locally and globally.

Programme Structure

Semester- I						
Course Code	**Course Title**	**Course Type**	**L**	**T**	**P**	**Credits**
MLB114	Information Storage and Retrieval	Core	4	0	0	4
MLB101	Research Methods and Statistical Techniques	Core	4	0	0	4
MLB119	Advance Information and Communication Technology (Theory)	Ability Enhancement	2	0	0	2
MLB120	Advance Information and Communication Technology (Practice)	Technical Skills	0	0	4	2
MLB115	Knowledge Organisation Universal Decimal Classification (Practice)	Skill based	2	0	0	2
MLB121	Seminar	Skill based	0	0	4	2
Discipline Elective-I (Any one of the following)						
MLB103	Information and Literature Survey in Social Sciences	Discipline Elective-I	3	0	0	3
MLB118	Information and Literature Survey in Natural Sciences					
Discipline Elective-II (Any one of the following)						
MLB106	Academic Library System	Discipline Elective-II	3	0	0	3
MLB107	Special Library System					
Total			**18**	**0**	**8**	**22**

Semester-II						
Course Code	**Course Title**	**Course Type**	**L**	**T**	**P**	**Credits**
MLB201	Information Analysis, Consolidation & Repackaging	Core	4	0	0	4
MLB218	Digital Libraries & Networking (Theory)	Core	4	0	0	4
MLB217	Information Use and User Studies	Compulsory Foundation	2	0	0	2
MLB210	Knowledge Organisation: Cataloguing: Non-Book Material (Practice)	Skill based	2	0	0	2
MLB211	Digital Libraries & Networking (Practice)	Technical Skills	0	0	4	2
MLB212	Media and Information Literacy	Value added Course	2	0	0	2
MLB213	Promoting Use of Libraries and Reading Habits in Community	MD	2	0	0	2
Discipline Elective-III (Any one of the following)						
MLB214	Engineering and Technology Information Systems and Services	Discipline Elective -I	3	0	0	3
MLB215	Health Information Systems and Services					
MOOC						
MLB299	XXX	MOOC	0	0	0	2
Total			**19**	**0**	**4**	**23**
Grand Total			**37**	**0**	**12**	**45**

Evaluation Criteria for Theory Courses

A. Continuous Assessment: [25 Marks]

   i.   CA-1Surprise Test (Two best out of three) (10 Marks)
  ii.   CA-2Assinments (10 Marks)
 iii.   CA-3 Term paper/Quiz/presentations (5 Marks)

B. Attendance(5marks)
C. Mid Semester Test- [30Marks]
D. End. Term Exam[40marks]

Semester: I

Course Title: Information Storage and Retrieval

L	T	P	Cr.
4	0	0	4

Course Code: MLB114

Total Hours: 60

Course Learning Outcomes

After completion of this course, the learner will be able to:
1. Understand and assess the techniques for evaluating information retrieval systems.
2. Analyze the types of indexing systems and their techniques.
3. Critically examine the usefulness of vocabulary control in information retrieval.
4. Evaluate the various search strategies used for retrieving information Abstracts and Abstracting.

Course Content

UNIT-I Information Retrieval Systems   15 hours

Information Retrieval Systems: Purpose, functions, components and Types; Information Retrieval System: Concept, definition, types, characteristics, components of ISRS. Information Retrieval Models. Library information retrieval systems; Evaluation of an Information Retrieval System;

UNIT-II Indexing Systems and Techniques   16 hours

Indexing: Concept, theory and methods; Types of indexing Systems-Pre-coordinate and Post- Coordinate (keyword indexing (KWIC), POPSI, PRECIS, Chain Indexing, Citation Indexing and Automatic Indexing).; Indexing Languages: Types and characteristics.

UNIT-III Vocabulary Control   17 hours

Vocabulary Control: Need, Purpose, Functions, types and characteristics. Vocabulary Control Tools; Subject Headings: Library of Congress Subject Headings, Sears List of Subject Headings and Medical Subject Headings, Thesaurus; Features, Structure and Construction, ERIC, UNESCO Thesaurus. Taxonomies.

UNIT-IV Abstracts and Abstracting   12 hours

Abstracts and Abstracting: Types, qualities and uses of abstracts; Art of abstracting, automatic abstracting; Psychological abstract; By psychological abstract; Chemical abstract

Transaction Mode: Lecture, PPT, Collective thinking, YouTube, problem solving, discussion & demonstration.

Suggested Readings:

- *Bates, M.J. (2012). Understanding information retrieval systems: management, types and Standards. Boca Raton, FL: CRC press.*
- *Kowalski, G.J. & May bury, M.T. (2002). Information Storage and Retrieval System: theory and implementation. (2nd ed.). New York: Kluwer.*
- *Cleveland, D. & Cleveland, A. (2013) Introduction to indexing and abstracting. (4th ed.). Englewood: Libraries Unlimited.*
- *Aitchison, J., Gilchrist, A. & Bawden, D. (2005). Thesaurus construction and use: a practical manual. (4th ed.). London: Taylor and Francis.*
- *Fransson, J. (2009). Efficient Information searching on the web: a handbook in the art of searching for information. Sweden: Fransson*
- *Manning, C. D., Raghavan, P., & Schütze, H. (2008). Evaluation in information retrieval. Introduction to information retrieval, 151-175.*
- *Bajpai, S.K. (1999). Modern information retrieval. New Delhi: EssEss Pub.*
- *Chowdhary, C.G. (1996). Text retrieval systems in information management. New Delhi: New Age International Pub.*
- *Ellis, David. (1996). Progress and problems in information retrieval. London: LA.*

Webography:

https://www.sciencedirect.com/journal/information-storage-and-retrieval

https://www.jstor.org/stable/24931057

https://pitt.libguides.com/metadatadiscovery/controlledvocabularies

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3484957/

Course Title: Research Methods and Statistical Techniques	L	T	P	Cr.
	4	0	0	4

Course Code: MLB101

Total Hours: 60

Course Learning Outcomes

After completion of this course, the learner will be able to:
1. Explore various research methods and their application to Library and Information Science.
2. Compare the various methods of data collection.
3. Study Computerized Data Analysis and Use of Software.
4. Organize and conduct research in a more appropriate manner by dealing with documentation of sources according to APA style of writing which enable them to write are search report.

Course Content

UNIT-I Concept of Research   15 hours

Research: Definition, meaning and objectives; Types of Research Basic & Applied Research; An Introduction.; Reliability and validity; Identification and formulation of research problem. Literature review; Research questions.

UNIT-II Research Methods, Techniques and Tools   16 hours

Research Methods; Research Design: An Introduction. Data collection tools: Questionnaire, Interview, Observation and Delphi.; Sampling techniques: Probability and non-probability.

UNIT-III Data Analysis and Use of Software   15 hours

Statistical Techniques: Measures of central tendency- Mean, Median, Mode; Measures of Dispersion, Mean deviation, Standard deviation. Computerized data analysis: Description, analysis and interpretation. Use of SPSS (Software package for social sciences).

UNIT-IV Research Reporting and Metrics.   14 hours

Research Report: Structure, style, contents and guidelines. Reference Styles: APA.; Bibliometric: Concept, definition and laws.; Science to metrics, Info metrics and Web metrics: Concept, definition and their relationship. Altmetrics.

Transaction Mode: Lecture, PPT, Collective thinking, YouTube, problem solving, discussion & demonstration.

Suggested Readings:

- *Bryman, A. (2012). Social research methods. (4thed.). Oxford: Oxford University Press.*
- *Henn, M., Weinstein, M. &Foard, N. (2009). A critical Introduction to Social Research. London: Sage.*
- *Kothari, C.R. (2004). Research Methodology: Methods and Techniques. (2nd ed.). New Delhi: New Age International.*
- *Pickard, A.J. (2013). Research Methods in Information. (2nded.). London: Facet.*
- *Punch, K. F. (2014). Introduction to Social Research: Quantitative and qualitative Approach. (3rded.). London: Sage.*
- *Kumar, R. (2011). Research Methodology: A step-by-step for beginners. (3rd ed.). London: Sage.*
- *Sehgal R.L. (1998). Statistical methods for Libraries. New Delhi: Ess Ess Pub.*
- *Sinha, S.C. & Dhiman, A.K. (2002). Research Methodology. (Vol.2). New Delhi: Ess Ess Publ.*
- *Wildemuth, B. M. (2009). Applications of Social Research to questions in information and libraries Science. Westport: Libraries Unlimited.*
- *Kumar, K. (1992). Research methods in library and information science. New Delhi: Har- Anand Pub.*
- *Powel, R. &Conn away, L. S. (2004). Basic Research Methods for Librarians. Westport: Libraries Unlimited.*
- *Creswell, J. W. (2014). Research Design: Qualitative, Quantitative and Mix Methods Approaches. (4thed.). London: Sage.*
- *Patton, Michael Quinn (2015) Qualitative Research and Evaluation Methods (4th ed.) New York: Sage Publication, Inc.*
- *Oseke, R. Donileen. (2013). Methodological Thinking: Basic Principles of Social Research Design. New Delhi: Sage Publication.*

Webography:

https://www.scribbr.com/methodology/qualitative-quantitative-research/
https://www.euacademic.org/BookUpload/9.pdf
https://www.simplilearn.com/data-analysis-methods-process-types-article
https://www.enago.com/academy/what-are-different-research-metrics/

Course Title: Advance Information and Communication Technology (Theory)

L	T	P	Cr.
2	0	0	2

Course Code: MLB119

Total Hours:30

Course Learning Outcomes

After completion of this course, the learner will be able to:
1. Acquaint with the students with basic concepts of computers and other Information Technologies.
2. Provide skills in using computers Software & Programming Language technologies.
3. Enable students to have an appreciation of the significance of IT managing information and Data Processing.
4. Generate awareness about internet communication and purpose of data security

Course Content

UNIT-I Computer Architecture and Technology   7 hours

Introduction to information technology. Computers-benefits and application. Computer architecture: Components, CPU, input and output devices Internal and External Storage Devices.

UNIT-II Software& Programming Language   7 hours

Software: Types of software. Programming Language, Utilities; Word Processors, Spread Sheets, Database Management Systems, Flow charting.

UNIT-III Data Processing   8 hours

Electronic media: electronic publishing; Data representation and processes: Calculation, logical operations, sorting, merging, storing, searching and retrieving.

UNIT-IV Societal Impacts of Information Technology   8 hours

Privacy, security and integrity of information; Computer security, cyber security and cybercrimes; Firewall, proxy server, and cryptographic techniques; The Information Technology Act, 2000.

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Transaction Mode: Lecture, PPT, Collective thinking, YouTube, problem solving, discussion & demonstration.

Suggested Readings:

- *Rowley, Jennifer (1998) Information Systems, Ed.2, London, Clive Bingley.*

- *Hunter & Shelly (1992) Computers and Common sense, New Delhi, Prentice-Hall.*

- *Sunders, R. (1989) Computers Today Ed. 2 John Wiley.*

- *Kashyap, M.M.(1993). Database Systems, New Delhi, Vikas.*

- *Basandra, S.K.: Computers today, New Delhi, Golgotia, 1998*

- *Brown (1983) Challenges of Information technology 1983.*

- *Satyanarayana, R. (1996) Information Technology and its facets. Delhi, Manak*

- *Hennig, N. (2017). Keeping up with emerging technologies: best practices for information professionals. Santa Barbara, C Libraries Unlimited*

Course Title: Advance Information and Communication Technology (Practice)

L	T	P	Cr.
0	0	4	2

Course Code: MLB120

Total Hours: 30

Course Learning Outcomes

After completion of this course, the learner will be able to:
1. Create database using WINISIS, and Alice for Windows
2. Familiarize with Library Software Package-Alice for Windows for in-house operations,
3. Using methods for   D Space.
4. Understand the Advance feature of Library Software (KOHA)

Course Content

1. Creation of database using WINISIS, and Alice for Windows.
2. Use of D Space, UIDW (Advance feature of KOHA).

Transaction Mode: Lecture, PPT, Collective thinking, YouTube, problem solving, discussion & demonstration.

Suggested Readings:

- *Xavier, C. (2007) World Wide Web design with HTML. New Delhi: Tata Mc Graw Hill.*
- *Bradley, P. (2007). How to use web 2.0 in your library. London: Facet Publishing.*
- *Cox, C. N. (2006). Federated search: solution or setback for online Library Services. Philadelphia: The Haworth Press.*
- *Donnelly, V. (2000). Designing easy-to-use websites: a hands-on-approach to structuring successful websites. Boston: Addison-Wesley.*
- *Lowery, J. W. (2002). Dreamweaver MX bible. Indianapolis: Wiley Publishing,*
- *Lynch, P. J. & Horton, S. (2009). Web style guide: basic design principles for creating web sites (3rd ed.). London: Yale University Press.*
- *Niederst, Jennifer (2006). Learning Web Design: A Beginner's Guide to HTML, Graphics and Beyond (2nd ed.) Mansion Shroff Publishers and Distributers Pvt. Ltd*

Course Title: Knowledge Organisation
Universal Decimal Classification (Practice)

L	T	P	Cr.
2	0	0	2

Course Code: MLB115

Total Hours:30

Course Learning Outcomes
After completion of this course, the learner will be able to:
1. Recognize techniques of classifying titles of Documents according to the UDC.
2. Compare the scheme of knowledge classification.
3. Explain the process related to construct classification number and will capable of applying the classification rules.
4. Advance level practical knowledge of library classification using the Universal Decimal Classification (UDC) scheme by classifying complex and simple titles respectively.

Course Content

UNIT- I Classification of documents according to UDC   08 hours
Classify and construct the class numbers of documents representing simple Subject.

UNIT- II Classification of documents according to UDC   09 hours
Classify and construct the class numbers of documents representing complex Subject.

UNIT-III Classification of documents according to UDC   07 hours
Classify and construct the class numbers of documents representing compound subject.

UNIT– IV Classification of documents according to UDC   06 hours
Synthesize class numbers by using different Auxiliary Tables and 'Add to Instructions' of UDC scheme

Transaction Mode: Lecture, PPT, Collective thinking, YouTube, problem solving, discussion & demonstration.

 Suggested Readings:
- *Fosket, A. C. (1973). Universal Decimal Classification. Clive Bingley, London.*
- *. Mcllwaine, I. C. (2007). The Universal Decimal Classification: A guide to its use.*
- *UDC Consortium, The Hague, Netherlands.*
- *Universal decimal classification. (Latest Edition). British Standards Institution, London*
- *British Standards Institution. & International Federation for Documentation. (1961). Universal Decimal Classification: Abridged English edition (3rd rev. ed.). London: BSI*

https://egyankosh.ac.in/bitstream/123456789/33086/1/Unit-12.pdf

Course Title: Seminar
Course Code: MLB121

L	T	P	Cr.
0	0	4	2

Total Hours:30

Course Learning Outcomes

After completion of this course, the learner will be able to:

1. Understand the concept and importance of learning outcomes in library science.
2. Explore different types of library science courses and their specific learning outcomes.
3. Learn methods for assessing and measuring these outcomes.
4. Discuss the impact of well-defined learning outcomes on students' academic and professional success

- The students will be sent to nearby libraries to identify community-based problems during first two weeks of the semester.
- They will submit their proposals for project by 3rd week.
- Research Report will be presented through seminar during 10th week of the semester.
- Final evaluation will be conducted during 14th week.

The criteria of evaluation will be:

- Significance and feasibility of the problem   10
- Method and procedure for the Research   10
- Project Report   10
- VIVA   20
- **Total Marks**   **50**

Suggested Readings and Resources:

- Association of College & Research Libraries. (2016). *Framework for information literacy for higher education*. Retrieved from https://www.ala.org/acrl/standards/ilframework
- Burkhardt, J. M. (2010). *Teaching information literacy: 50 standards-based exercises for college students*. American Library Association.
- Bemis, M. F. (2014). Library and information science: A guide to key literature and sources (3rd ed.). American Library Association.
- Author, A. (2023). Information literacy instruction: best practices in academic libraries. *Journal of Education for Library and Information Science, 64*(3), 245-260. https://doi.org/10.1234/jelis.2023.001
- American Library Association. (n.d.). *Information literacy*. Retrieved June 27, 2024, from https://www.ala.org/educationcareers/education/standards/guidelines/informationliteracy
- Chartered Institute of Library and Information Professionals. (n.d.). *Professional development*. Retrieved
- June 27, 2024, from https://www.cilip.org.uk/membership/professional-development

Course Title: Information and Literature Survey in Social Sciences

Course Code: MLB103

L	T	P	Cr.
3	0	0	3

Total Hours:45

Course Learning Outcomes

After completion of this course, the learner will be able to:
1. Identify the distinguishing characteristics of social science disciplines problems and research trends
2. Use, and critically evaluate social science literature Information sources
3. Understand the current theories, methods, issues, Databases & Networked in the social sciences
4. Which affect the Creation, dissemination, and uses of social science literature and Resources Survey of Research activities.

Course Content

UNIT-I Disciplines of Social Science   11 hours

Social Science disciplines: Scope of the major Courses: Economics, Political Science, Sociology, History, Brief Survey of the contributions made by prominent authors in these Fields. Social science disciplines: Developments, problems and research trends.

UNIT-II Information sources   12 hours

Information sources: Role of primary, secondary and tertiary documents in the growth and development of Social Sciences.; Information sources: Evaluation of important secondary and tertiary sources of information in social sciences including distributed and net-worked sources.

UNIT-III Databases & Networked   12 hours

Databases: Networked and distributed databases in Social Science.
Internet-based Resources and Services: A brief introduction in the context of Social Science.
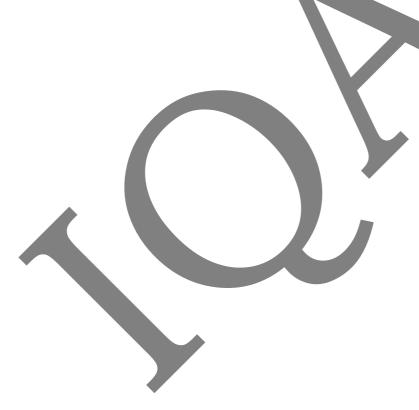
UNIT-IV Survey of Research activities   10 hours

Research activities: Brief survey of the activities of the research institutions and professional organizations in the growth and development of Social Science disciplines with particular reference to India, U.K. and U.S.A.

Transaction Mode: Lecture, PPT, Collective thinking, YouTube, problem solving, discussion & demonstration.

Suggested Readings:

- *Agrawal, S.P. (1987). Social science information and documentation: search for relevance in India. New Delhi: Concept Pub.*
- *Agrawal, S.P. (1989). Development of library services in India: social science information. New Delhi: Concept.*
- *Binwal, J.C. (Ed.). (1990). Social science information: problems and prospects. New Delhi: Vikas Pub.*
- *Birdsall, W. F. (1994). Myth of electronic library: librarianship and social change in America. Westport: Greenwood.*
- *Research Centre on the Social Implications of Industrialization in Southern Asia (1956) Research information bulletin: social science projects in Southern Asia. Calcutta: Research Centre on the Social Implications of Industrialization in Southern Asia.*
- *British Library. (2006). Social science search: the complete research service. London: British Library.*
- *Tyagi, K.G. &Johry, N. (Eds.). (2001). Directory of social science libraries and information centres in India. New Delhi: NASSDOC*

Course Title: Information and Literature Survey in Natural Sciences

L	T	P	Cr.
3	0	0	3

Course Code: MLB118

Total Hours: 45

Course Learning Outcomes

After completion of this course, the learner will be able to:
1. Identify the distinguishing characteristics and organization of the various types of Information.
2. Use, search and critically evaluate science literature and secondary science information Resources and services.
3. Understand the CAS, SDI, Abstracting and Indexing Services uses of science literature and resources.
4. Acquaint the Case Study of Science Libraries in India.

Course Content

UNIT-I Science disciplines and their Development   11 hours

Science disciplines: Scope of the major Courses: Physics, Chemistry, Biology, Mathematics, Brief Survey of the contributions made by prominent authors in these fields; Social science disciplines: Developments, problems and research trends.

UNIT-II Information Sources   12 hours

Information sources: Role of primary, secondary and tertiary documents in the growth and development of science. Information sources: Evaluation of important secondary and tertiary sources of information in science including distributed and net-worked sources; Internet-based Resources and Services: A brief introduction in the context of science.

UNIT-III Library Organization and Services   12 hours

Organizational Structure of Science Libraries; Staff Manual, Library Surveys, Statistics and Standards, etc.; CAS, SDI, Abstracting and Indexing Services, Library Bulletin; Resource Sharing and Networking.

UNIT-IV Financial and Human Resource Management   10 hours

Determination of Finance, Sources of Finance; Types of Budget Nature, Size, Selection, Recruitment, Qualification and Training; Responsibilities and Duties; Competency Development Case Study of Science Libraries in India.

Transaction Mode: Lecture, PPT, Collective thinking, YouTube, problem solving, discussion & demonstration.

Suggested Readings:

- *Auger C P (1994) Information Sources in Grey Literature Ed. 3, Bowker, and London.*
- *Chapman Li (2001) Managing acquisitions in library and information services Library Associations, London.*
- *Grogan, N (1982) Science and technology: an introduction to the literature Ed. 4 Clive Bingley, London.*
- *Hernon Peter and Whitman, John R (2001) Delivering satisfaction and service Quality: a customer-based approach for libraries, American Library Association, Chicago.*
- *Lawes Ann, (19930) Management skills for the information manager Gower Publishing, London.*
- *Raitt (David (1997) Libraries for the new millennium Library Association, London.*
- *Saha, J (1969) Special libraries and information services in India and the USA Scarecrow, New York.*
- *Scammell, AW (1997) Ed Handbook of special librarianship and information work Aslib, London.*
- *Singh, S P (2005) Special libraries in the electronic environment Book well, New Delhi.*
- *Strauss, L J (1972) Scientific and technical libraries: their organization and Administration Ed. 2 Beckey and Hayes, New York.*

Course Title: Academic Library System	**L**	**T**	**P**	**Cr.**
	3	**0**	**0**	**3**

Course Code: MLB106

Total Hours:45

Course Learning Outcomes

After completion of this course, the learner will be able to:
1. Acquaint with the present setup of Academic library system in India.
2. Familiarize with the process of planning of information products and services.
3. Aware CAS, SDI, Abstracting and Indexing Services Resource Sharing and Networking
4. The academic library services and user education, Analyze the financial and HRM of Academic Library.

Course Content

UNIT-I Academic Libraries and their Development   **12 hours**

Development of University and College libraries with special reference to India and its Role in open and distance education/learning. Role of UGC in the development of college and university libraries in India; Study of the recommendations of various committees and commissions with regard to academic libraries in India.

UNIT-II Collection Development and Management   **10 hours**

Collection Development and Management: Books and Periodicals; Non-Book Materials: Electronic-Resources and Databases. Library Building: Planning; Basic elements in the design Organizational Structure of Academic Library.

UNIT-III Library Organization and Services   **12 hours**

Library Organization and Administration: Administrative organization of the library; Authority and its decentralization.; CAS, SDI, Abstracting and Indexing Services, Library Bulletin, Newspaper Clipping; Resource Sharing and Networking; Extension services: Need, purpose and application for Academic Library system.

UNIT-IV Financial and Human Resource Management   **11 hours**

Financial Management: Sources of finance, different types of budgets, accounting and auditing, cost effectiveness and cost benefit analysis; Human Resource Management: Staffing, job description and analysis, job training and Development, performance appraisal.

Transaction Mode: Lecture, PPT, Collective thinking, YouTube, problem solving, discussion & demonstration.

Suggested Readings:

- *Arpita RC. (2013). Academic library management: universities, colleges and institutions. Jaipur: Vista Publishers.*
- *Bavakutty, M., Aziz, T. & Abdul, A. (2014). Redefining Academic Libraries in the Knowledge Society. India: EssEss Pub.*
- *Albitz, B., Avery, C., & Zabel, D. (2014). Rethinking collection development and management. Santa Barbara, California: Libraries Unlimited.*
- *Eden, B. E., Fagan, J. C. & Maryland, L. (2014). Leadership in academic libraries today: connecting the orytopractice.US: Rowman & Littlefield.*
- *Ryan, B. (2013). Optimizing academic library services in the digital milieu: digital devices and their emerging trends. Oxford: Chandos Pub.*
- *Nelson, B. E. (2014). The academic library administrator's field guide. Chicago: ALA Editions, anim print of the American Library Association.*
- *Tenopir, C. (2012). Academic libraries and research data services: current practices and plans for the Future: an ACRL white paper. Chicago: Association of College and Research Libraries.*
- *Sharma, D. (2013). Excellence in academic libraries: vision for future. New Delhi: L.G. Publishers Distributors.*
- *Garofalo, D.A. (2013). Building communities: social networking for academic libraries. Oxford: Chandos Publishing.*
- *BAKER, David, (1997) Resource management in academic libraries Library Associations, London.*

Course Title: Special Library System

L	T	P	Cr.
3	0	0	3

Course Code: MLB107

Total Hours: 45

Course Learning Outcomes

After completion of this course, the learner will be able to:
1. present set up of Special library system in India and Provide various types of library services to special library users
2. Acquire knowledge on concepts and functions of special libraries, Select, acquire, organize and manage special library system
3. Discuss the role of Information Service and Library Building
4. Understand the role of Resource Sharing and Marketing of Information in Research in development of special Libraries

Course Content

UNIT-I Special Libraries   10 hours

Special Libraries: Concept, role, characteristics, and functions. Development of special libraries in India.; Role of Special Libraries in R and D in information society.; Library and Information Policy at National Level in India.

UNIT-II Library Organization and Administration   12 hours

Library Organization and Administration: Administrative organization of the library; Authority and its Decentralization. Collection Development and Management: Government documents, maps, Manu scripts, newspaper clippings, serials, specifications (patents and Standards) Technical reports, theses.; Financial Management auditing: Sources of finance, budgeting techniques.

UNIT-III Information Service and Library Building   11 hours

Planning and Organization of Information Services: CAS, SDI, Indexing and abstracting, Newspaper clippings, Literature searching.; Extension service: Need, purpose and Application in Special Library system.; Library Building: Planning, basic elements in the design of Special library buildings; Furniture and Fittings.

UNIT-IV Resource Sharing and Marketing of Information   12 hours

Resource Sharing and Networking: Need, prospects and problems. Change and quality management with special reference to library automation and networking; Human Resource Management: Staffing, job description and analysis, job training and Development, performance appraisal. Financial Management: Sources of finance, different types of budgets, accounting and auditing, Cost effectiveness and cost benefit analysis.

Transaction Mode: Lecture, PPT, Collective thinking, YouTube, problem solving, discussion & demonstration.

Suggested Readings:

- *Faruqui,K.K.(1998).Planning library building. New Delhi: Anmol Publications.*
- *Liu, C., Peek, J., Jones, R., Buus, B., & Nye, A. (1994). Managing Internet information services. NY: O'Reilly.*
- *Radhakrishna K.K.A. (1998). Selective Dissemination of information services. New Delhi: Anmol Publ.*
- *Strauss, L.J. (1972). Scientific and technical libraries: their organisation and administration. New York: Becker and Hayes.*
- *Gupta, D.K. (2006). Marketing library and information services: International perspectives (Vol.159). Berlin: Walterde Gruyter.*
- *D'Andraia, F. (2013). The academic library director: reflections on a position in transition. London: Routledge.*
- *Munde, G. (2013). Everyday HR: a human resources handbook for academic library staff. Chicago: Neal-Schuman.*
- *Scammell, A. (Ed). (1997). Handbook of special librarianship and information work. London: ASLIB.*
- *Robertson, G. (2019). Disaster planning for special libraries. Chandos*
- *Creative planning of special library facilities. (2020). S.l.: Routledge.*
- *In Yap, J. M., In Perez, M. J. V., In Ayson, M. C. I., & In Entico, G. J. E. (2016). Special library administration, standardization, and technological integration.*
- *Matarazzo, J. M., & Connolly, S. D. (2016). Knowledge and special libraries. London; New York: Routledge/Taylor & Francis Group.*

Semester-II

	L	T	P	Cr.
Course Title: Information Analysis, Consolidation & Repackaging	4	0	0	4

Course Code: MLB201

Total Hours: 60

Course Learning Outcomes

After completion of this course, the learner will be able to:

1. Conceptualization of Information Analysis, Consolidation and Repackaging.
2. Evaluate the nature and types of Information products.
3. Analyse the process of content analysis and abstracting
4. Assess the significance of Marketing Information products.

Course Content

UNIT-I Information Analysis, Consolidation and Repackaging: 14 hours

Information Analysis, Consolidation and Repackaging: Concept, need and Process; Guiding Principles for arrangement and presentation of idea in a helpful Sequence; Information Consolidation Products: Concepts, types, design, development and methodology; Knowledge and skills required for information analysis and consolidation.

UNIT-II Information Products: 16 hours

Information Products: Nature, concept, types, design and development. Information Newsletters, Hand Books, House Bulletins, In-house Communication, Trade Bulletin, Product Bulletin, State-of-the-Art Report, Trend Report, Technical Digests.

UNIT-III Content Analysis, Abstract and abstracting: **14 hours**

Content Analysis: Concept types and processes. Abstract: Definition and types, Characteristics and Qualities of good abstracts. Abstracting: need, process. Computers and abstracting. Abstracting organizations and Services

UNIT-IV Planning, Management and Marketing of an Information Analysis & Consolidation   16 hours

Planning and Management of Information Analysis and Consolidation Units. Marketing of Information Concept, need and benefits of Information Marketing; Marketing of profit and non-profit organization; Trends in marketing of Information Services and Information Marketing in India.

Transaction Mode: Lecture, PPT, Collective thinking, YouTube, problem solving, discussion & demonstration.

Suggested Readings:

- *Seetharama, S. (1997) Information Consolidation and Repackaging, New Delhi EssEss.*
- *Cleveland, D. & Cleveland, A. (2013) Introduction to indexing and abstracting. (4th ed.). Englewood: Libraries Unlimited.*
- *Manning, C. D., Raghavan, P., & Schütze, H. (2008). Introduction to information retrieval, Cambridge: CUP.*
- *Ali, P. M. (2014). Information Analysis, Consolidation and Repackaging. Journal of Knowledge & Communication Management, 4(1), 98-100.*
- *Singh, Sewa (2014). Information analysis, consolidation and repackaging. Atlantic Publishers & Distributors Pvt Ltd*
- *Cleveland, D. & Cleveland, A. (2013). Introduction to indexing and abstracting (4th ed). Englewood: Libraries Unlimited.*
- *Megan (2015). Digital content creation. Rosen Young Adult*
- *Gupta, B.M. (Ed.). (1988-2000). Handbook of libraries, archives and information centres in India. (Vols 16.) New Delhi South Asia Books.*
- *Koltay, T. (2010). Abstracts and abstracting: a genre and set of skills for the 21st century. Oxford, Chandos*
- *Saracev, T. & Wood, J.S. (1981). Consolidation of information: A handbook of evaluation, restructuring and repackaging of scientific and technical information. Paris: UNESCO.*
- *Seetharama, S. (1997). Information consolidation and repackaging. New Delhi: EssEss Publ.*
- *Bhattacharya, G. &Gopinath, M.A.(Eds). (1981). Information Analysis and Consolidation: Principles, procedures and products. In DRTC Annual Seminar No. 18. Bangalore: DRTC.*

Course Title Digital Libraries & Networking (Theory)

L	T	P	Cr.
4	0	0	4

Course Code: MLB218

Total Hours: 60

Course Learning Outcomes

After completion of this course, the learner will be able to:
1. Analysis the need and steps involved in automating libraries.
2. Discover the bibliographical standards and tools used for library automation.
3. Examine the process of digitization and the usefulness of digital preservation.
4. Analyses the significance of institutional repositories in libraries and information Networking

Course Content

UNIT- I Library Automation   17 hours
Library Automation Needs, scope and Definition; Library Automation – Areas, Planning, Selection of Hardware and Software, Implementation and Evaluation; Standards for Library Automation. Barcode, RFID, NFC (Near Field Communication), QR Code, Biometric, Smartcard: Features and Applications.

UNIT- II Library Automation Standard and tools   16 hours
In-house Operations: Acquisition, Cataloguing, Circulation, Serial Control, OPAC, etc. Bibliographic Standards: Dublin Core and MARC 21; Introduction to Metadata: Types of Metadata; Library Software Packages: Overview and House Keeping Operations; Case Studies: Koha.

UNIT- III Digital Library and Institutional Repository   17 hours
Digitization – Planning, Selection of Materials, Hardware, Software, Process, Issues. Digital Library: Genesis, Characteristics, Types, Architecture; Standards, Formats and Protocols, DOI. Digital Library Initiatives – National and Institutional Repositories - Need, Purpose, Types and Tools.

UNIT- IV Networking   10 hours
Networking: Need, benefits, topologies. Internet technology; Wireless Communication Media, Wi-Fi, Li-fi, Mobile Communication.; Networks Security- Firewalls, Anti-virus software.

Transaction Mode: Lecture, PPT, Collective thinking, YouTube, problem solving, Discussion & demonstration.

Suggested Readings:

- *Bishop, A. P., Van House, N. A., & Butten field, B. P. (Eds.). (2003). Digital library use: Social practice in design and evaluation. MIT Press.*

- *Boardman, Mark. (2005). The language of websites. London: Rutledge Taylor & Francis Group.*
- *Bolan, Kimberly, & Cullin, Robert. (2011). Technology made simple: An improvement guide for small and medium libraries. Chicago: American Library Association.*
- *Bradley, Phil. (2003). WWW: How to design and construct web pages. London: Aslib.*
- *Chowdhury, G. G. & Chowdhury, Sudatta. (2003). Introduction to Digital Libraries. Ane Books.*
- *Chowdhury, G. G., & Chowdhury, Sudatta. (2001). Information sources and searching on the World Wide Web. London: Facet Publishing.*
- *Chowdhury, G. G., & Foo, S. (Eds.). (2012). Digital libraries and information access: research perspectives. Facet Publishing.*
- *Cohn, John M., Kelsey, Ann L., & Fiels, Keith Michael. (1998). Planning for library automation: A practical handbook. London: Library Association.*
- *Deegan, Marilyn & Tanner, S. (2006). Digital Preservation. Facet Publishing.*
- *Fox, Edward; Andre Goncalves, Marcos & Shen, Rao (2012). Theoretical Foundations for Digital Libraries: The 5SApproach. Morgan and Claypool*
- *Ingersoll, Patricia, & Culshaw, John. 2004. Managing information technology: A handbook for systems librarians. Westport, CT: Libraries Unlimited.*
- *Jones, Richard et al. (2006). The Institutional Repository. Oxford: Chandos Publishing.*

	L	T	P	Cr.
Course Title: Information Use and User Studies	2	0	0	2

Course Code: MLB217

Total Hours:30

Course Learning Outcomes

After completion of this course, the learner will be able to:

1. Acquaint students with the basic concepts of information and information Users.
2. Make students understand and appreciate the concept of Information Seeking Behavior of user groups.
3. Explain the need for careful and continuous study of and contact with the users.
4. Understand various methods and techniques of use studies and to understand what type of technique(s) are Useful and when and how it can be applied or conducted.

Course Content

UNIT-I Data, Information and knowledge   9 hours

Data, Information and knowledge: Conceptual difference. Information: Definition, nature, use and value.; Information Users: Identification of Users, Concept of Need, Want, Demand & Requirement, Users Categories: Planners, Policy Makers, Managers, R&D Personnel, People at Grass Root.

UNIT-II Use of Information   8 hours

Use of Information: Use of Information in Management activities; Use of Information in Decision Making; Use of Information in Research and Development (R & D), Role of Information in Raising the Standards & Quality of Life.

UNIT-III User Studies   6 hours

User Studies: Scope and Content of User Studies; Studies by Types of Libraries: Different User Groups, Different Disciplines, Critical Review of Some Large-Scale User Studies; Methodology of User Studies: Qualitative & Quantitative Paradigm, Data Collection Methods.

UNIT-IV User Education & User Satisfaction   8 hours

User Education: Concept, Need, Purpose, Methods and Evaluation.
Information Seeking Behaviour of Different User Groups. Models of information-seeking behaviours; User Satisfaction: Measurement of User Satisfaction, Suggestion collection, Development of User service based on User Suggestion and Feedback.

Transaction Mode: Lecture, PPT, Collective thinking, YouTube, problem solving, Discussion & demonstration.

Suggested Readings:

- *Sridhar, M. S. (2002) Library use and user research: with twenty case studies. New Delhi: Concept Pub.   Co.*
- *Feather, John, and R. P. (2003) Sturges. International encyclopedia of information and library science. 2nd ed. London: Routledge.*
- *Kawatra, P.S. (1992) Library user studies: a manual for librarians and information scientists. Bombay India: Jaico Pub. House.*
- *Guha, B. (1978) Documentation and information: services, techniques and systems. Calcutta: World Prerr Private.*
- *Kumar, P. S. G (2004) Library and users: theory & practice; (paper VIII of UGC model curriculum). Delhi: B. R. Publ. Corp.*

Additional Reading list will be provided by the concerned teacher

Web Sources:
http://www.en.wikipedia/wiki/Information_literacy
http://www.infolit.org
http://www.unesco.org/webworld/ramp/html/r8722e/r8722e0l.htm
http://www.slideshare.net/BLAlib/user-education-what-is-it-and-why-is-itimportant-1725827
http://www.slideshare.net/Janecatalla/library-orientation-14381347

Course Name: Knowledge Organisation: Cataloguing: Non-Book Material (Practice)	**L**	**T**	**P**	**Cr.**
Course Code: MLB210	**2**	**0**	**0**	**2**

Total Hours:30

Course Learning Outcomes

After completion of this course, the learner will be able to:

1. Involve in cataloguing of uniform titles and serial publications Analyses.
2. Compare the cataloguing rules of different types of Cartographic Materials documents.
3. Aquatinted with the process of Library Non-Print Material Cataloguing, Motion Pictures Video Recording and Sound Recording.
4. Apply different ways of cataloguing library Electronic Resources materials.

Course Content

UNIT-I cataloguing of   **7 hours**

Uniform Titles   Serial Publications: Complexities Cartographic Materials-Map. Atlas, Globe.

UNIT- II Cataloguing of   **8 hours**

Motion Pictures/Video Recording, Sound Recording.

UNIT- III cataloguing of   **7 hours**

Electronic Resources: Data and Program, Computer Files.

UNIT -IV Cataloguing of   **8 hours**

Micro Form-Microfilm, Microfiches, Micro card.

Transaction Mode: Lecture, PPT, Collective thinking, YouTube, problem solving, discussion & demonstration.

Suggested Readings:

- *Chan, L. M. (2007). Cataloging and classification: An introduction (3rd ed.). New York: Scarecrow Press.*
- *Gorman, M., & Winkler, P. W. (Eds.). (1988). Anglo-American cataloguing rules (2nded.). Ottawa: Canadian Library Association.*
- *Ranganathan, S. R. (1938). Theory of library catalogue. Madras Library Association, Madras.*
- *Ranganathan, S. R., & Neelameghan, A. (2006). Classified catalogue code: With additional rules for dictionary catalogue code. New Delhi: Ess Ess Pub.*
- *Ranganathan, S.R. (1990). Cataloguing practice (2nd ed.). Bangalore: Sarada*
- *Ranganathan Endowment for Library Science.*
- *Sears, M. E. (2018). Sears list of subject headings (22nd ed.). HW Wilson.*

Course Title: Digital Libraries & Networking (Practice)

L	T	P	Cr.
0	0	4	2

Course Code: MLB211

Total Hours: 30

Course Learning Outcomes

After completion of this course, the learner will be able to:
1. Design a fully-fledged automation system for various functions of SOUL in the library.
2. Design a comprehensive automation system to streamline various functions of the library software
3. Use of Digital Library Software E-Print
4. Use of Digital Library Software Greenstone

Course Content

UNIT-I Library Automation Practice
   SOUL

UNIT-II Library Automation Practice
   New GenLib
   Other available software

UNIT-III Digital Library Software
   E-Print

UNIT-IV Digital Library Software
   Greenstone

Transaction Mode: Lecture, problem solving, discussion & demonstration, PPT, Collective thinking, YouTube.

Suggested Readings
- *Mishra, V. (2016). Basics of Library Automation, Koha Library Management Software and Data Migration: Challenges with Case Studies. EssEss Publications.*
- *Poornima, G & Girish, R. (n.d). Creating and Managing Institutional Repository Using DSpace: A Case Study Approach. Educreation Publishing.*
- *Sharma, A. (2019). Koha for Beginners. Willford Press*
- *Sirohi, S., & Gupta, A. (2010). Koha 3 Library Management System. Packt Publishing Ltd.*

L	T	P	Cr.
2	0	0	2

Course Title: Media and Information Literacy

Course Code: MLB212

Total Hours: 30

Course Learning Outcomes

After completion of this course, the learner will be able to:
1. Understand the concept of Information literacy, its importance for lifelong learning.
2. Recognize the different terms related to Models Information Literacy.
3. Examine the LIS Education
4. Collect the information of literacy programmes in different types of Libraries.

Course Content

UNIT-I Information Literacy   8 hours

Information Literacy: Concept, Definition, Need, Characteristics. Significance of IL in information society; Types of Information Literacy –Technology Literacy, Media Literacy, Computer Literacy & Digital Literacy.

UNIT-II Models Information Literacy   7 hours

IL Models, Standards, and Framework & Guidelines of Information Literacy: SCONUL, ACRL, UNESCO, IFLA; Information Literacy: Initiatives and Forums in India.

UNIT-III Information Literacy and LIS Education   8 hours

Information Literacy and LIS Education & its importance in lifelong learning.

UNIT-IV Role of libraries in Information Literacy   7 hours

Role of libraries in Information Literacy: School, College and University Libraries, Public Libraries, Special Libraries.

Transaction Mode: Lecture, PPT, Collective thinking, YouTube, problem solving, Discussion & demonstration.

Suggested Readings :

- *Andretta S. (2012) Ways of experiencing information literacy: Making the case for a relational approach. Oxford, Chandos.*
- *Godwin P. and Parker J. (2009) Information literacy meets library. Santa Barbara, Facet.*
- *Mackey TP and Jacobson TE. (2011) Teaching information literacy on line. London, Neal- Schuman.*
- *Association of College and Research Libraries (ACRL). (2000) Information Literacy Competency Standards for Higher Education. Chicago, American*

Library Association.
http://www.ala.org/ala/acrl/acrlstandards/informationliteracycompetency.html

- *Bawden David. (2001) Information and Digital Literacy: a review of concepts. Journal of Documentation 57, 2; 2001; 218-259.*
- *Bruce Christine (1997) The Seven Faces of Information Literacy. Adelaide, Auslib Press.*
- *Council of Australian University Librarians. (2001) Information Literacy Standards. Canberra, Council of Australian University Librarians.*
- *Presidential (1989) Committee on Information Literacy, American Library Association. Final Report. Chicago: American Library Association. http://www.ala.org/ala/acrl/acrlpubs/whitepapers/presidential.htm*
- *Society of College, National and University Libraries Sconul. (1999) Information skills in higher education: a Sconul Position Paper. London, SCONUL.*
  http://www.sconul.ac.uk/activities/inf_lit/papers/Seven_pillars.html
- *Torras (Mc) And Saetre T P. (2009). Information Literacy Education. 2009. Oxford, Chandos Publishing.*
- *Cardiff University Library Services. (2016) Handbook for Information Literacy Teaching. http://sites.cardiff.ac.uk/ilrb/handbook/*

Course Title: Promoting Use of Libraries and Reading Habits in Community
Course Code: MLB213

L	T	P	Cr.
2	0	0	2

Total Hours: 30

Course Learning Outcomes

After completion of this course, the learner will be able to:
1. Understand the need of promoting library usage
2. Encourage reading habits in community
3. Facilitate library users with best services
4. Develop critical thinking Best practices in the libraries of lifelong learning

Course Content

UNIT– I - Promoting use of Libraries   8 hours
Functions of a public library
IFLA/UNESCO Public Library Manifesto
Role of Public Libraries in Promoting Reading Habits

UNIT-II - Library Publicity and Marketing   7 hours
Publicity and marketing for promoting library use
Providing platforms to access resources
Social networking sites to facilitate information access

UNIT-III – Library services to promote usage   7 hours
Newspaper clipping, e- library services, multimedia sources and services, digital library, web-based resources, reading room, references and sources of information.

UNIT-IV Best practices in the libraries   8 hours
Book exhibitions, Library hour, Orientation, New arrivals, Story-telling, Children's films with message, Discussions Posters, Competitions, Books fairs, reading programs.

Transaction Mode Lecture, PPT, Collective thinking, YouTube, problem solving, Discussion & demonstration.

Suggested Readings :
- *Steven Nathanson, John T. Pruslow, R. Levitt (2008). The Reading Habits and Literacy Attitudes of Inservice and Prospective Teachers*
- *How To Develop Reading Habits in Students? www.theasianschool.net*
- *Malipatil B. (2021). Role of Public Libraries in Promoting Reading Habits. Library Progress (International), 41(1), 138-143.*
- *Akanda A.K.M. eamin Ali. Hoq, Kazi mostak Gausul and Hasan Nazmul (2013). Reading habit of students in social sciences and arts: A case study of Rajshahi University Chinese librarianship: an international electronic Journal 35. Accessed June 9 2017 http://www.iclc.us/cliej/c135AHH.pdf*
- *IFLA (2004) "IFLA/UNESCO public library Manifesto 1994" accessed June 28 2017 https://archive.ifla.org/VII/s8/unesco/eng.htrnl*

Course Name: Engineering and Technology Information Systems and Services
Course Code: MLB214

L	T	P	Cr.
3	0	0	3

Total Hours: 45

Course Learning Outcomes

After completion of this course, the learner will be able to:

1. Acquaint the students with the present setup of Engineering and Technological library system in India.
2. Acquainted with the process of planning of information products and services.
3. Develop skills for designing collection development policies in engineering libraries and to expose the students with the real working environment of library operations.
4. Acquaint the students with the academic library services and Resource Sharing and Networking; analyze the functions of libraries in academic institutions.

Course Content

11 hours

UNIT–I Engineering and Technological Libraries and their Development

Objectives and Functions; History and Development of Libraries with Special Reference to India; Role of Engineering and Technological Libraries.
Role of Agencies in the Growth and Development of Engineering and Technological; Libraries in India.

UNIT-II Collection Development and Management   10 hours

Periodicals, Conference; Literature, Grey Literature, Patents, Standards, Specifications and Government Publications; on-Book Materials.
Electronic Resources and Online Databases.

12 hours

UNIT-III Library Organization, Administration and Information Services

Organizational Structure; Staff Manual, Library Surveys, Statistics and Standards, etc.; CAS, SDI, Abstracting and Indexing Services Library Bulletin, Newspaper Clipping Services Computerized Services; Resource Sharing and Networking: INDEST AICTE Consortium; Information Literacy Programmers

UNIT–IV Financial and Human Resource Management   11 hours

Determination of Finance, Sources of Finance; Types of Budget Nature, Size, Selection, Recruitment, Qualification and Training; Responsibilities and Duties; Competency Development.

Transaction Mode: Lecture, PPT, Collective thinking, YouTube, problem solving, Discussion & demonstration.

Suggested Readings:

- *Bhatt, R. K. (1995). History and development of libraries in India. Mittal Publications.*

- *Johnson, Peggy. (2018) Fundamentals of collection development and management. American Library Association.*

- *Edwards, E. G. (2005). Developing Library & Information Centre Collections. Westport: Libraries Unlimited.*

- *Krishan, Kumar. (1997). Library organisation. New Delhi: South Asia Books.*

- *Gurdev, Singh. (2013). Information Sources, Services and Systems. Prentice Hall India Learning Private Limited.*

- *Association of College and Research Libraries (ACRL). (2018). Information Literacy.*

- *Roberts, Stephen. (2013). Financial and cost management for libraries and information services. Walter de Gruyter.*

- *Ian, B & Holden, Len. (1997). Human Resource Management: A contemporary perspectives. Financial Times/ Prentice Hall.*

	L	T	P	Cr.
Course Name: Health Information Systems and Services	3	0	0	3

Course Code: MLB215

Total Hours:45

Course Learning Outcomes

After completion of this course, the learner will be able to:

1. Examine the information centres.; Information Services related to health sciences.
2. Ascertain the role of Health Science Information Sources.
3. Summarize the process for organizing business information for end user support.
4. Illustrate the functions of various health science information systems and network.

Course Content

UNIT- I Health Science Information   12 hours

Growth and development of Health Science. Types of Health Science libraries/information centres; Information Services: Current Awareness Service, SDI service, Indexing and abstracting service, Literature search; Users of Health Science information.

UNIT -II Health Science Information Sources   10 hours

Sources of Information: Documentary: Printed and non-print (List to be provided by the concerned teacher).

UNIT -III Health Science Information Institutions   11 hours

National Medical Library. WHO. ICMR. Department of Biotechnology. Council of Ayurveda and Siddha; Council of Homeopathy. National Institute of Health and Family Welfare.

UNIT –IV Information Systems and Networks   12 hours

HELLIS, MEDLARS, BIOSIS. Trends in Health Science Information System. Application of Hypertext, Hypermedia, Multimedia. Expert System and Artificial Intelligence.

Transaction Mode: Lecture, PPT, Collective thinking, YouTube, problem solving, Discussion & demonstration.

Suggested Reading:

- *Balgrosky, Jean A. (2015). Essentials of health information systems and technology. Jones & Bartlett.*

- *Carmel, M. (Ed.). (1995): Health care librarianship and Information work. (22nd ed.). Library Assn Pub Limited.*
- *Dixit, R.P. (1995). Information management in Indian medical libraries. New Delhi: New Concepts.*
- *Dixon, Brian. (2016). Health Information Exchange: Navigating and Managing a Network of Health Information Systems. Academic Press.*
- *Gupta, S.P. (1993). Information technology and health science libraries. New Delhi: MLAI SP. Pub.*
- *Kushniruk, Andre W &Borycki Human, Elizabeth (2008). Human, Social, and organizational aspects of health information systems. Hershey*
- *Magnuson, J., Fu, Jr., P. C. (2014). Public health informatics and information systems. Springer.*
- *McGlynn, Elizabeth A; Brook, Robert H & Kerr, Eve A. (1998). Health Information Systems: Design Issues and Analytic Applications.R and*
- *Michelsen, Kai. (2015). Promoting better integration of health information systems: best practices and challenges. WHO*
- *Rodrigues, Joel. (2010). Health information systems: concepts, methodologies, tools, and applications. Hershey*
- *Siuly, S., Lee., et.al (2018). Health information systems. Springer.*
- *Skurka, Margaret Flettre. (2017). Health information management: principles and organization for health information services. Wiley.*