DEPARTMENT OF INFORMATION SCIENCE AND LIBRARY MANAGEMENT

UNIVERSITY OF DHAKA

Revised Curriculum for Professional Master's

in

Information Science and Library Management

Duration	:	01 Year 06 Months (18 months)
Semester	:	03 (1st Semester - 3rd Semester)
Number of Courses	:	16
Total Marks	:	1300
Total Credits	:	52

Outline of Curriculum

First Semester

Course No.	Course Title	Marks	Credits
PMISLM-501	Introduction to Information Studies	75	3
PMISLM-502	Information Resources Development	75	3
PMISLM-503	Information Sources and Services	75	3
PMISLM-504	Information and Communication Technologies	75	3
PMISLM-505	Organization of Knowledge (Classification Theory)	75	3
	Viva-Voce	25	1
	Total	**400**	**16**

Second Semester

Course No.	Course Title	Marks	Credits
PMISLM-506	Indexing and Abstracting	75	3
PMISLM-507	Libraries, Archives and Records Management	75	3
PMISLM-508	Information Literacy	75	3
PMISLM-509	Organization of Knowledge (Cataloguing Theory)	75	3
PMISLM-510	Automation of Information Institutions	75	3
	Viva-Voce	25	1
	Total	**400**	**16**

Third Semester

Course No.	Course Title	Marks	Credits
PMISLM-511	Information Networking and Resource Sharing	75	3
PMISLM-512	Information Retrieval Techniques	75	3
PMISLM-513	Digital Library Systems	75	3
PMISLM-514	Research Methodology and Statistics	75	3
PMISLM-515	Organization of Knowledge (Classification Practical)	75	3
PMISLM-516	Organization of Knowledge (Cataloguing Practical)	75	3
	Viva-Voce	50	2
	Total	**500**	**20**

Total 1300 52

75 marks (03 credits) distribution

Evaluation System	Marks
Midterm Examinations (1st & 2nd)	20
Class Participation	05
Term Paper/Presentation/Quiz	10
Semester Final Examination	40
Total	75

Professional Master's in Information Science and Library Management

1st Semester

PMISLM 501: Introduction to Information Studies

Course Title	**Introduction to Information Studies**
Course No.	**PMISLM 501**
Credit Hours	**03 Credits**
Brief Description of the Course	This course introduces the fundamentals of the discipline of information science and library management. It covers the major issues related to the concepts of data, information, knowledge; growth of information institutions; education for the library and information profession; techniques and tools for organizing library and information resources; and technological trends in library and information work.
Learning Objectives	The major objectives of this course are: • To provide a basic understanding of the discipline of Information Science and Library Management and its relationship with other disciplines; • To explore the domain of information professions with its philosophy, values and ethical principles; • To provide knowledge on various methods, tools and standards for organizing library and information resources; • To recognize the contemporary as well as future technological trends in library and information activities.

Course Details

Unit	Content	Learning Outcomes	Methods & Techniques, Activities
1	**Conceptual Issues** : Concept of data, information, knowledge and wisdom; Types, characteristics, qualities and parameters of information; Human information needs; Information communication; Information literacy; Information theories; Economics of information; Information science as a profession and a discipline	Will identify and explain important concepts and ideas related to Information Science and Library Management	Class lecture, multimedia presentation, Interactive discussion
2	**Development of Information Institutions**: History of writing, books and libraries; Libraries in different ages; Different types of libraries and information institutions; Different departments within an information institution and their functions, role of library, documentation and information institutions.	Will be able to know the history and development of libraries and other information institutions and their role in society	Class lecture, multimedia presentation, Visualization
3	**Library and Information Science Education:** History and growth of library and information science; Interdisciplinary nature of Information Science and its linkage with other discipline; Library Science vs Documentation vs Information	Will define the domain of education for information profession with its role, philosophy, values and ethical principles from	Class lecture, multimedia presentation, Interactive discussion, practice

	Science; Philosophy, values, ethics and standards of Information professions**;** Five Laws of Library Science; Career opportunities for LIS graduates and professionals	national and global perspectives	
4	**Organization of Information Resources**: Printed and electronic information resources in libraries; Methods and tools for organizing information resources: Classification, cataloguing, taxonomies, indexing, abstracting, bibliographies, computer databases; etc.; Information processing; Concepts and cycles of data management (DM), information management (IM) and knowledge management (KM).	Will be able to recognize and use the basic tools and standards for the organization and management of information resources including data, information and knowledge	Class lecture, multimedia presentation, Visualization
5	**Information Tools and Standards:** Various documentation standards, metadata protocols – Machine Readable Catalogue (MARC), Common Communication Format (CCF), ISBN, ISSN, Dublin Core, etc.; Digital Object Identifiers (DOI), Information access models and tools.	Will have the ability to apply concepts, principles, theories and technologies in contemporary library and information work.	Class lecture, multimedia presentation, Interactive discussion, practice
6	**Technological trends in Information Institutions**: Impact and implications of technological changes in libraries; redefining the library; from traditional to automated, electronic, multimedia, digital and virtual libraries, The internet and its applications; Searching the web using various search engines; Digital text collections; Repositories and archives; Free and fee-based document delivery services.	Will be able to know the existing as well as future trends in technologies used in library and information management. Also, Will be able to apply and practice various theories, principles and technologies tools for library and information work	Class lecture, multimedia presentation Tour.

Summative Assessment: Theoretical Courses

Assessment Type	Assessment Methods	Proportion of Marks
Mid-term Exams	Two mid-term examinations will be held during the course of studies	20
Class Attendance & Participation	Students' attendance as well their participation in class activities will be recorded and marks will be given accordingly	05
Term Paper/Presentation/Quiz	Students will be assigned specific topic for term paper/presentation/quiz by the course teacher	10
Semester Assessment	Final exams consisting of both broad and short questions will be conducted at the end of the course	40

Reading List/Bibliography

1. Chowdhury, G. G., Burton, P. F., McMenemy, D., & Poulter, A. (2008). *Librarianship: An introduction*. London: Facet Publishing.
2. Chowdhury, G. G., & Chowdhury, S. (2008). *Introduction to digital libraries*. London: Facet Publishing.

3. Dilli, K. T. (1997). *Basics of library and information sciences*. New Delhi: Vikas Pub. House.
4. Miller, J. B. (2014). *Internet technologies and information services*. Santa Barbara: Calif.
5. Ranganathan, S. R., Sivaswamy, A. P. S., & Sayers, W. C. B. (2006). *The five laws of library science*. Arizona: DLIST.
6. Rokade, S. M. (2016). *Foundation of library and information science*. New Delhi: Studera Press
7. Rubin, R. (2016). *Foundations of library and information science*. Chicago: Neal-Schuman, an imprint of the American Library Association.
8. Sharma, R. N. (2012). *Libraries in the early 21st century: An international perspective*. Berlin: De Gruyter Saur.
9. Srivastava, H. K. (2011). *Foundation of library and information science*. New Delhi: Mohit Publications.

PMISLM-502: Information Resources Development

Course Title	**Information Resources Development**
Course No.	**PMISLM-502**
Credit Hours	**03 Credits**
Brief Description of the Course	This course introduces major information resources available in modern libraries and information institutions. The rationale of this course is to provide students with the knowledge required to identify, evaluate, and select print, audio-visual, and electronic materials for on-site and remote access. Topics covered include: information resources development methods, theories, policies and principles; selection tools and aids; management of physical print and e-resources; collection evaluation and analysis; future trends and legal and ethical issues related to information resources development.
Learning Objectives	The major objectives of this course are: • Define the terminology of library collection development and successfully carry out the roles and responsibilities of a librarian/information manager in collection management. • Discuss historical, contemporary, and emerging trends and issues in society, education, and government to collection development practices. • Locate and use appropriate research and professional resources in collection development and management. • Identify, distinguish between, and apply selection and weeding criteria for different kinds of library / information center collections. • Apply/formulate appropriate policies and procedures for collection development and management in diverse environment including academic, public, national and special libraries. • Assess user needs and evaluate existing collections, including budgeting processes for collection development. • Practice collaborative resource development and management within library and community. • Electronic resources and licensing: legal and ethical issues

Course Details

Unit	Content	Learning Outcomes	Methods & Techniques, Activities
1	**Building information resources in libraries and information institutions:** Functional divisions of a modern library system; Mission statement and need assessment; Purposes, methods and policies of information resources development (IRD); Cooperative collection development; Five Laws of LibraryScience and their relation to IRD.	Student will critically evaluate the definitions and will share their own understanding on these resources include materials that support the intellectual growth, personal development, individual interests and recreation needs of students.	Lecture discussion with multimedia, Interactive discussion
2	**Principles and practices:** Book selection principles and theories; Selection principles and practices in public, academic, national and special libraries; Selection principles advocated by: Drury, Dewey, Haines, Ranganathan,	Student will understand the principles and different theories related to book selection and also know about good qualities of a book selector	Lecture discussion with multimedia, Interactive discussion

	McColvin, Spiller, John Bonk and Magrill and others. Role or qualities of good book selector. Selection of books, fiction and non-fiction books, and reference books; Book reviews. Annotations.		
3	**Collection development process:** Process of collection development; Approaches to collection development: material centric vs user centric approaches; Procedures and methods of acquisition of books and other reading materials; Acquisition policy; Communication with publishers, book sellers and concerned agencies; Ordering and subsequent activities; Problems of acquisition of books and periodicals in Bangladesh.	Students will know the process involved in building up the total collection of a library and it comprises areas such as policy formation, selection, acquisition, maintenance and weeding of library materials	Lecture discussion with multimedia, Interactive discussion, video presentation
4	**Assessment and evaluation of the collection development:** Overviews of collection maintenance and evaluation; Criteria and methods of collection evaluation; Factors of evaluation	Collection development is the systematic assessment, selection and deselection of library resources	Lecture discussion with multimedia Interactive discussion
5	**Stock taking and weeding:** Accession register, Nature, scope, principles and methods of stock taking and weeding; Need for stock taking and weeding in libraries and information centres; Barriers to weeding.	Students will get the idea or concepts, issues and methods related to the acquisition including evaluation, selection, purchasing, processing, storing and dissemination.	Lecture discussion with multimedia, Interactive discussion
6	**Collection development problems and prospects:** Challenges of collection development; Legal Issues, copyright, Censorship; Professional Ethics and intellectual freedom in collection development; Collection development future alternative approach for the future; Library finance, budget and book selection,	Student will be able to know about electronic resources and licensing, legal and ethical issues	Lecture discussion with multimedia, Interactive discussion

Summative Assessment: Theoretical Courses

Assessment Type	Assessment Methods	Proportion of Marks
Mid-term Exams	Two mid-term examinations will be held during the course of studies	20
Class Attendance & Participation	Students' attendance as well their participation in class activities will be recorded and marks will be given accordingly	05
Term Paper/Presentation/Quiz	Students will be assigned specific topic for term paper/presentation/quiz by the course teacher	10
Semester Assessment	Final exams consisting of both broad and short questions will be conducted at the end of the course	40

Reading List / Bibliography

1. Carter, M.D., Bonk, W.J., & Magrill, R.M. (1974). Building library collection. (4th ed.). Scarecrow Press. Cenzer. P.S. and Gozzi, C. I.valuation, Acquisition and Collection development
2. Chakrabarti, A.K., (1983). A treatise on book selection.
3. Gardner, R. K. (1981). Library collections, their origin, selection, and development. New York: McGraw-Hill. Hains, H.E.(1935). Living with Books: the art of book selection.

PMISLM-503: Information Sources and Services

Course Title	**Information Sources and Services**
Course No.	**PMISLM-503**
Credit Hours	**03 Credits**
Brief Description of the Course	This course focuses on information services provided in libraries and information centres along with the techniques and sources consulted for providing the services. It aims to help students grasp the fundamentals of modern information and reference services so that they can design, implement and evaluate reference and information services themselves.
Learning Objectives	The major objectives of this course are: • To help students identify, evaluate and manage print and digital sources of information. • To assist students understand, design, implement and assess information services for individuals and groups. • To facilitate comprehensive understanding of research advisory, information consultancy and other specialized information services to cater to the need of researchers and general readers.

Course Details

Unit	Content	Learning Outcomes	Methods & Techniques, Activities
1	**Introduction to Reference and Information Services:** To identify reference and information services. To know the history of reference and information services. To understand the roles and significance of information services. To identify the prevailing trends of reference and information services across the globe.	Students will be engaged in collaborative activities to assess their knowledge and understanding.	Lecture, Interactive discussion, Multimedia presentation
2	**Information Sources and their Use:** To identify major information sources. To distinguish between print and electronic sources. To learn about the practical aspects of various information sources. To understand the changing nature of information sources and media.	Students will be assigned with tasks to assess their understanding about information sources and their use.	Lecture, Interactive discussion, Multimedia presentation
3	**General and Specialized Reference Services:** To distinguish between traditional and modern information and reference services. To understand the various services models, their merits and demerits. To understand the nature and implications of various information services including CAS, SDI, indexing and abstracting services, etc. To learn the techniques of conducting and evaluating reference interview.	Students will be engaged in hands-on exercise to apply their knowledge about various kinds of references services.	Lecture, Interactive discussion, Multimedia presentation

4	**Electronic Resources for Reference:** To understand key technologies for providing electronic reference services. To learn about major electronic reference sources and services. To know about the changing trends of electronic reference services.	Students will be asked to apply their practical knowledge in using electronic resources for answering reference questions.	Lecture, Interactive discussion, Multimedia presentation
5	**Management of Information and Reference Services:** To learn about organizing, staffing, monitoring and other management aspects of reference departments. To develop understanding about best practices of reference service management. To learn about the techniques of evaluation of references services. To know about the tools and techniques of training and human resource development at reference sections of different types of libraries and information centres. To learn about the modern trends of management of information and reference services.	Students will be engaged in interactive activities to appraise their understanding of the management of reference and information services.	Lecture, Interactive discussion, Quiz, Multimedia presentation
6	**Ethical Aspects of Information and Reference Services:** To comprehend the needs for ethical practices in reference and information services. To have a solid understanding about the ethical implications of information, technology and information services. To know about prevailing ethical standards practiced in reference and information works.	Students will be engaged in idea sharing, interactive discussion and similar activities to evaluate their understanding and attitude regarding ethics of reference services.	Lecture, Interactive discussion, Quiz, Multimedia presentation

Summative Assessment: Theoretical Courses

Assessment Type	Assessment Methods	Proportion of Marks
Mid-term Exams	Two mid-term examinations will be held during the course of studies	20
Class Attendance & Participation	Students' attendance as well their participation in class activities will be recorded and marks will be given accordingly	05
Term Paper/Presentation/Quiz	Students will be assigned specific topic for term paper/presentation/quiz by the course teacher	10
Semester Assessment	Final exams consisting of both broad and short questions will be conducted at the end of the course	40

Reading List / Bibliography

- Bopp, R. E. and Smith, L. A. (Eds). (2011). *Reference and Information Services: An Introduction* (Library and Information Science Text Series). Santa Barbara, California: Libraries Unlimited.
- Cassell, K. A. *and Hiremath, U. (2018).* Reference and information services : an introduction. (4TH Ed.). Chicago, ALA Neal-Schuman.
- Kumar. K. (2009). *Reference service.* 5th Revised ed. Noida: Vikas Publishing House.
- Wong, M. A., Saunders, L. and Smith, L. C. (Eds). (2020). *Reference and Information Services: An Introduction.* Santa Barbara, California: Libraries Unlimited.
- হক, কাজী মোস্তাক গাউসুল ও হাসান, মো: নাজমুল। (২০১৬)। একুশ শতকের প্রেক্ষাপটে রেফারেন্স ও তথ্যসেবা। ঢাকা।

PMISLM-504: Information and Communication Technologies

Course Title	**Information and Communication Technologies**
Course No.	**PMISLM-504**
Credit Hours	**03 Credits**
Brief Description of the Course	This course aims to provide knowledge of the role of technology at the theoretical and pragmatic level. Through lectures, presentations, educational visits and hands-on experience, students will gain insight into relevant technology-raised issues and will learn what kind of technology is applied in different areas of practical life. The knowledge acquired in this course complements the knowledge obtained in other required first and second-term courses.
Learning Objectives	The general objective of the course is to develop basic knowledge as well as skills on Information and Communication technologies particularly computer, computer hardware, software and operating systems. The specific objectives are as follows: a. To provide a solid foundation in the fundamental concepts, theories and principles in information and communication technologies. b. To discuss critical issues surrounding their use and how they impact everyday life. c. To create an understanding of the concepts and principles underlying the design and use of computer hardware, software, operating systems.

Course Details

Unit	Content	Learning Outcomes	Methods & Techniques, Activities
1	**Concepts of Information and Communication Technologies (ICTs):** Evolution and development of ICT, use and applications of ICT in different fields of library and information institutions in Bangladesh, impact of ICT in library and information systems.	Will know the history, evolution, generation of computer, its types and functions and the impact of ICTs on education and society.	Class lectures, discussion, concept mapping, visualizations.
2	**Computer Hardware:** Overview of computer hardware, essential hardware components of a computer system, input and output (I/O) devices, other optional accessories of computer systems; common PC problems, their causes and solutions assembling, dissembling a pc, computer security and maintenance.	Will identify variety of computer hardware, common pc problems, probable causes and their solutions.	Assignment, presentation, Q and A session
3	**Computer Software:** Concepts, classification of software and introduction of some application software used in library management.	Will have the ability to use different types of software in library and information institutions.	Group discussion, homework, Q&A session
4	**Computer Networking:** Introduction to networking, types of networks, network topologies, transmission media and network accessories. Internet: Basic concepts, architecture, and connectivity, TCP/IP and other protocols, internet tools and services, web applications in LIS; website construction, hosting and	Will be able to handle various networks, internet architecture, TCP/IP and other protocols.	Lectures, group works PPT presentation.

	maintenance; tools and skills for web development.		
5	**Operating Systems:** Operating system concepts, functions and components: introduction to Windows and Linux.	Will be able to acquire the knowledge of operating systems and will have the ability to use Windows and Linux.	Lectures, group works PPT presentation.
6	**Hands on Practices:** Windows and Microsoft Office	Will gain the understanding and practical knowledge of Window and Microsoft Office applications.	Assignment, Group works.

Summative Assessment: Theoretical Courses

Assessment Type	Assessment Methods	Proportion of Marks
Mid-term Exams	Two mid-term examinations will be held during the course of studies	20
Class Attendance & Participation	Students' attendance as well their participation in class activities will be recorded and marks will be given accordingly	05
Term Paper/Presentation/Quiz	Students will be assigned specific topic for term paper/presentation/quiz by the course teacher	10
Semester Assessment	Final exams consisting of both broad and short questions will be conducted at the end of the course	40

Reading List / Bibliography

This is not intended to be prescriptive or exhaustive:

1. Andrew, Jean. A Guide to Managing and Maintaining Your PC, Cambridge, Course Technology.
2. Clements, A. The Principles of Computer Hardware.
3. Silberschatz, A. and Galvin, P.B. Operating System concepts.
4. Minasi, M. The Complete PC Upgrade and Maintenance Guide, New Delhi, BPB.

PMISLM-505: Organization of Knowledge (Classification Theory)

Course Title	**Organization of Knowledge (Classification Theory)**
Course No.	**PMISLM -505**
Credit Hours	**03 Credits**
Brief Description of the Course	This course is designed to give practical knowledge about theoretical basis of classification. It emphasizes on objectives, principles, and special features of classification and also discusses high predicable and its application in classification. Moreover, this course will also focus on classification of documents with the help of Dewey Decimal Classification (DDC) scheme and enable students to evaluate the differences among DDC, Universal Decimal Classification (UDC), and Library of Congress (LC) classification schemes.
Learning Objectives	The major objectives of this course are: ➢ Students will be able to know the basics of library classification; ➢ Understand the principles of book classification; ➢ Know the selected Schemes of Classification and Web classification; ➢ Learn the arrangement methods and structural form of classification; ➢ Capable to identify the subject matter and to build up the analytical ability for classification; ➢ Gather knowledge about the selected tools and techniques for practical aspects of classification.

Course Details

Unit	Content	Learning Outcomes	Methods & Techniques, Activities
1	**Concepts of knowledge:** Structure and development of knowledge; universe of knowledge; knowledge and information; Structure of knowledge in library and information science; attributes of knowledge; impact of knowledge on classification.	Perform the classification of documents with the help of DDC, UDC, LC scheme and web DDC.	Class lecture, multimedia presentation, Interactive discussion
2	**Introduction to classification:** Meaning of classification, purpose and functions of classification; introduction to major knowledge classification schemes; distinction between knowledge classification and book classification; Formal rules of divisions and canons of classification; Five predicable and value of Porphyry's tree in library classification; Development and current trends in library classification; classification practices in Bangladesh.	Understand the key concepts of basic classification and its application in libraries	Class lecture, multimedia presentation, Interactive discussion, participation
3	**Special features of book classification and notation:** Special features of book classification, generalia class, standard subdivisions, form classes; Notation and index functions and qualities of an ideal notation, types of notation; Auxiliaries of notation, merits and demerits of different types of indexes.	To learn the basic ideas of determining subject matters for building correct classification numbers	Class lecture, multimedia presentation, and interactive discussion

4	**Various schemes for classification:** Knowledge classification; different philosophical systems; library classification schemes; Classification schemes earlier to DDC, various schemes for library classification.	To build up analytical capacity for determination of subjects and learning about Web DDC	Class lecture, multimedia presentation
5	**Basics of major schemes of classification:** General schemes of classification, Dewey decimal classification; Universal decimal classification, library of congress classification; Colon classification**,** bibliographical classification.	To build up classification number using selected tools and techniques	Class lecture, multimedia presentation, Group practice
6	**Analysis and applications of DDC, UDC and web DDC UDC:** Special features, notational systems: hospitality, mnemonics, common and special auxiliaries; Features, qualities of DDC notation, six tables, gradual development and changes in DDC, notes; Introduction; features of LCC; structure of LCC; LCC notation; advantages and disadvantages; Web DDC; Various Initiatives taken by the different organizations for the development of classification.	To learn in detail about different classification schemes like- DDC, UDC and LC.	Class lecture, multimedia presentation, Visualization

Summative Assessment: Theoretical Courses

Assessment Type	Assessment Methods	Proportion of Marks
Mid-term Exams	Two mid-term examinations will be held during the course of studies	20
Class Attendance & Participation	Students' attendance as well their participation in class activities will be recorded and marks will be given accordingly	05
Term Paper/Presentation/Quiz	Students will be assigned specific topic for term paper/presentation/quiz by the course teacher	10
Semester Assessment	Final exams consisting of both broad and short questions will be conducted at the end of the course	40

Reading List / Bibliography

1. Broughton, V., & Facet Publishing. (2015). *Essential classification*. London: Facet Publishing.
2. Brown, J. D., & Stewart, D. (1986). *Subject classification for the arrangement of libraries and the organization of information: With tables, indexes, etc., for the subdivision of subjects*. London: Grafton.
3. Joudrey, D. N., Taylor, A. G., Miller, D. P., & Taylor, A. G. (2015). *Introduction to cataloging and classification*.
4. Joudrey, D. N., Taylor, A. G., &Wisser, K. M. (2018). *The organization of information*.
5. Marcella, R., & Newton, R. (1994).*A new manual of classification*.Aldershot: Gower
6. Mills, J. (1973). *A modern outline of library classification*. London: Chapman & Hall.
7. Saiful, I. K. M. (1991).*Number building in Dewey decimal classification: 19th and 16th editions: a practical manual*. Dhaka: Khan and Sons Pub.
8. Sayers, W. C. B., &Maltby, A. (1978).*Sayers' Manual of classification for librarians*. London: Deutsch.
9. Sayers, W. C. B., & Arthur, (1970). *A manual of classification for librarians*. Place of publication not identified: Andre Deutsch.
10. gyÝx, Gg. bvwmiDwÏb (2014) | †*gŠvwjK †kÖYxKiY* (1g ms¯‹iY)| XvKv: Rvwnb-mvwgb cÖKvkbx|

2nd Semester

PMISLM-506: Indexing and Abstracting

Course Title	**Indexing and Abstracting**
Course No.	**PMISLM-506**
Credit Hours	**03 Credits**
Brief Description of the Course	While abstract works as a mirror of a document, index provides effective leads to the certain terms that are covered in a particular document. Thus, this course introduces the basic concepts, essential theories, methods and techniques of indexing and abstracting. The topics covered: index and indexing, arranging index entries, preparing indexes of different types of books and non-book materials, periodical indexing, procedures of automated indexing, indexing language, thesaurus, evaluation of indexes, etc. It also includes abstract and abstracting, different types of abstract, methods and styles of abstracting, international standards, and guidelines for abstracting, preparing abstracts for different types of documents including, journal article, review, bibliography, monograph, and short communication, etc.
Learning Objectives	The major objectives of this course are: • To understand the concepts of index, abstract, indexing, and abstracting. • To gain knowledge on the methods of arranging index entries, procedures of preparing index for different types of books and non-book materials including periodicals, newspapers, music, sound recordings, etc. • To understand the indexing language, thesaurus construction, and the evaluation of indexes. • To identify and understand the methods and styles of abstracting, international standards, and guidelines for abstracting. • To prepare abstracts for different types of documents including journal article, review, bibliography, monograph, and short communication, etc.

Course Details

Unit	Content	Learning Outcomes	Methods & Techniques, Activities	Assessment Tools/ Procedures
1	**Concept and Background of Index:** Definition of index, origin and development, importance, and types of indexes; Author index, alphabetic subject index, classified, cumulative and collective subject index.	Will be able to learn about the origin and development of index, its importance, and details idea of different types of indexes.	Class lecture, multimedia presentation, Interactive discussion	Fundamental, conceptual, and functional orientation of the course
2	**Indexing methods and different techniques:** Citation indexing, pre-co-coordinating indexing, post co-coordinating indexing, chain indexing, POPSI, PRECIS, KWIC, KWOC etc. rules for	Will able to identify citation indexing, pre-co-coordinating indexing, post co-coordinating indexing, chain indexing, POPSI, PRECIS, KWIC,	Class lecture, multimedia presentation, Visualization	Discussion about the various methods involved in indexing

	arranging index entries.	KWOC etc. and some rules for arranging index entries.		
3	**Indexing of book and non-book materials:** Principles, techniques, and arrangement; Book indexing –principles, techniques entry, heading, subheading, style and layout, newspaper indexing; Indexing of non-book items-music, sound, recordings, films, etc. computer based indexing systems-statistical methods, syntactic method, semantic method.	Will be capable of making book index, newspaper index and indexing of other non-book items, e.g., music, sound, recordings, films, etc. Also will be able to gather knowledge of computer based indexing systems	Class lecture, multimedia presentation, Interactive discussion, practice	Discussion and hands-on practice of making index for different types of documents
4	**Indexing language and index evaluation:** Free language and controlled vocabulary indexing; Thesaurus- indexing terms and their relations, thesaurus construction and evaluation; Different methodologies of index evaluation, recall, precision, rations, and devices; Cost analysis.	Be able to learn about indexing language, it types, controlled vs. natural language; Thesaurus and their relations, thesaurus construction, Also be able to know different methodologies of index evaluation, recall and precision ratio.	Class lecture, multimedia presentation, Visualization	Discussion about indexing language and methods of index evaluation
5	**Concept and methods of abstract:** Definition of abstract, importance, abstract vs. bibliographies, index vs. abstracts, abstract vs. annotations, types of abstracts, quality of abstract; Methods and procedures of abstracting, international standard for abstracting, abstract writing, evaluation of abstracts, online abstracting systems.	Will be able to understand abstract, and its importance; Will also learn to differentiate among abstract, index, bibliography, abstract and annotation. Will be able to learn different types of abstracts, its quality, and methods and procedures of writing abstracting.	Class lecture, multimedia presentation, Interactive discussion, practice	Discussion and hands-on practice for creating abstract for different types of abstract
6	**Recent trends in indexing and abstracting**: Existing situation, problems, and prospects of indexing and abstracting services in Bangladesh**.**	Will be ale to explore the existing situation, problems, and prospects of indexing and abstracting services in Bangladesh	Class lecture, multimedia presentation Tour.	Discussion and arrangement of tours to the academic libraries to explore the real situation

Summative Assessment: Theoretical Courses

Assessment Type	Assessment Methods	Proportion of Marks
Mid-term Exams	Two mid-term examinations will be held during the course of studies	20
Class Attendance & Participation	Students' attendance as well their participation in class activities will be recorded and marks will be given accordingly	05
Term Paper/Presentation/Quiz	Students will be assigned specific topic for term paper/presentation/quiz by the course teacher	10
Semester Assessment	Final exams consisting of both broad and short questions will be conducted at the end of the course	40

Reading List / Bibliography

Borko, H. & Bernier, C.L. (2003). *Abstracting concepts and methods*. Academic Press.

Chakrabarti, A.R. and Chakrabarti, B. (1984). *Indexing: principles, processes and products*. Calcutta: World Press.

Cleveland, D. B & Cleveland, A. D. (2013). *Introduction to indexing and abstracting* (4th ed.), UK: Libraries Unlimited.

Collision, R.L. (1973). *Indexes and indexing* (3rd ed.)

Knight, G.N. (1979). *Indexing: the art of a guide to the indexing of books and periodicals*, London.

Lancaster, F. W. (2003). *Indexing and Abstracting in Theory and Practice,* 3rd ed., Facet.

Nancy C. M. (2005). *Indexing books* (2nd ed.), Chicago: University of Chicago Press.

Riaz, M. (1989). *Advanced indexing and abstracting practices*. Atlantic.

Rowely, J.E. (1988). *Abstracting and indexing.* Clive Bingley.

Sharma, C.K. and Sharma, A.K. (2007). Information Process and Retrieval, New Delhi: Atlantic

PMISLM-507: Libraries, Archives, and Records Management

Course Title	**Library, Archives, and Records Management**
Course No.	**PMISLM-507**
Credit Hours	**03 Credits**
Brief Description of the Course	The aim of this course is to familiarize students with the structure and functioning of records, and archives with a view to understanding how history is written as well as underlying theoretical concepts of library management. This course introduces the archival history, present situation, and prospects of records, and archival institutions in Bangladesh along with all over the world. This course will help students to gain knowledge about efficient administration, and management techniques needed to manage the library or information center. The course will be of value to those interested in seeking careers as record managers/archivists.
Learning Objectives	The major objectives of this course are: ● To address principles and practices of management and their applications in library and information institutions; ● To prepare learners for managerial responsibilities in libraries and information institutions; ● To make the students aware of applying management techniques to achieve organizational effectiveness and efficiency. ● To identify and explain the knowledge, skills and attitudes important in the field of records and archives management. ● To describe the present status of archives and the roles, responsibilities of the archivist in the different parts of the world. ● To identify and describe cultural, informational, educational, and recreational needs of archives. ● To expose the students with the real working environment of archives by assigning them a topic related with the archival institutions. ● Students will study and evaluate the method of preservation and conservation of valuable sources enabling them to identify causes of damage, and manage the control over security issues

Course Details

Unit	Content	Learning Outcomes	Methods &Techniques, Activities
1	**Introduction to management, organization, administration and organizational structures:** Concept and principles of management, organization, and administration; Differences in organization, management and administration; Different management schools of thought; POSDCORB; TQM; Management by objectives (MBO): Peter Drucker, G. Odiorne; Principles and characteristics, different patterns of organizational structure; Relationship of the library with its parent organization.	Will be able to know the concepts and principles of management, organization, administration and different patterns of organizational structure.	Presentation, quiz and question-answer

2	**Human Resource Management (HRM) in libraries:** HRM in libraries; Factors for ideal HRM; Theories and styles of personnel management, staff recruitments; selection, development and manpower planning; management inventory chart, system approach to staffing, system approach to selection; selection Process; Techniques and instruments, job designing / job analysis, job description, job evaluation, performance appraisal; motivation and leadership – supervision; Inter-personnel relations: training and development, public relations.	Will analyze theories and styles of personnel management	Oral test, Presentation
3	**Financial management:** Principles, sources of income and heads of expenditure; Budget and budgeting, preparation of budget; Relationship between budgeting and reporting; Cost effectiveness and Cost benefit analysis.	Will gain an understanding of budgets, cost-effectiveness, cost-benefit analysis, income sources, and spending divisions within a corporation.	Class lectures, discussion, concept visualizations
4	**Record management:** Definition of records; Origin and types of records; Records life cycle and continuum theory; Record inventory, filing, classifying and indexing records; Introduction to record management; Historical perspectives, and structure of record management program; Record management vs knowledge management: Electronic record management: Appraisal, disposition and description,; Vital record protection; Various record room in Bangladesh	Will be able to conceptualize the basic concepts of records and fundamentals of manual and electronic record management.	Interactive class lecture/group discussion
5	**Archives:** Definition, origin, purposes, importance of archives, ethics in archives, Professional ethics, roles and responsibilities of archivists, present scenario of archives management in Bangladesh, the Bangladesh National Archives (BNA), ordinance, archival education in Bangladesh and in the world, national and international associations i.e. ICA, SAA, FIAF, AAO, ACARM, BARMS, etc.	Will learn about archives, archival education in Bangladesh and in the world.	Interactive class lecture/group discussion
6	**Preservation and Conservation:** Definition, need, objectives and issues of preservation; Drafting preservation principles; Preservation planning; Preservation management; Preservation and conservation of archives and library materials, Enemies of archival and library materials, environment, people, insects, disasters; natural and man-made etc., causes of deterioration of manuscript, digital preservation: types, benefits,	Will be able to gain knowledge about enemies of archival and library materials and identify the preventive measures of archives and library materials	Class lectures, discussion, concept visualizations

	access. Digitization of archival materials and their retrieval techniques; Preventive measures of archives and library materials, e.g. environmental control, good house-keeping, pest control etc., post deterioration measures, fumigation, de-acidification, repair and restoration, binding, lamination, etc.		

Summative Assessment: Theoretical Courses

Assessment Type	Assessment Methods	Proportion of Marks
Mid-term Exams	Two mid-term examinations will be held during the course of studies	10%
Class Attendance & Participation	Students' attendance as well their participation in class activities will be recorded and marks will be given accordingly	5%
Semester Assessment	Final exams consisting of both broad and short questions will be conducted at the end of the course	35%

Reading List / Bibliography

Bradshere J.G. (Ed.).(1991). *Managing archives and archival institution.* University of Chicago Press.

Brown,C. (2014). *Archives and Recordkeeping: Theory into practice*. Facet publishing

Charlotte Brunskill and Sarah R. Demb (2012). Records Management for Museums and Galleries: an introduction. Chandos Publishing.

Forde,H. and Rhys-Lewis, J.(2013). *Preserving archives* (2nd ed.). Facet publishing.

Gorman, C. (2003). Staff development in libraries. New Delhi: Dominant Publishers.

Green, R. A. (Ed.) (2007). Library Management: A Case Study Approach. (Chandos Information Professional Series). Oxford: Chandos Publishing.

Hussey, L. K. and Velasquez, D. (2019). Library management 101: a practical guide. 2nd Ed. Chicago: ALA Editions.

Kumar, K. (2003). Library administration and management. New Delhi, Vikas.

Kumar, P.S.G. (2003). Management of Library and Information Centers. Delhi: B. R. Publishing

Millar,L.A. (2010). *Archives: principles and practices.* New York: Neal-Schuman Publishers.

Robertson, Craig (2021). The Filing Cabinet: A Vertical Story of Information. Univ Of Minnesota Press

Saffady, William & Ginn, Mary L (2016). Records and Information Management: Fundamentals of Profession Practice. ARMA International.

Schelenburg, T.R. (1956). *Modern archives*. Chicago: The University of Chicago Press.

Schelenburg, T.R. (1965). *Management archive*s. New York: Columbia University Press.

PMISLM-508: Information Literacy

Course Title	**Information Literacy**
Course No.	**PMISLM-508**
Credit Hours	**03 Credits**
Brief Description of the Course	This course is introduced to orient students with the concept of information literacy (IL). IL is a building block for lifelong learning, and it encourages critical thinking ability and helps to solve the information problems with confidence. The combination of research skills, critical thinking skills, computer technology skills, and communication skills make students confident to deal with information in the complex information world. IL is essential for academic success, effective functioning in the workplace, and participation in society as knowledgeable citizens.
Learning Objectives	• To know why and how information is needed in academic and practical settings, help students how to measure the need of information and find out the possible sources; • To prepare students how to search, evaluate the correct sources and use the information sources systematically, orient students with the ethical use of information and discuss the process of using information ethically. • To understand the types of IL, framework, theory and application of IL in the daily lives, how the professional associations to help awareness of IL.

Course Details

Unit	Content	Learning Outcomes	Methods & Techniques, Activities	Assessment Tools/ Procedures
1	**Introduction to IL:** Information, history and definition of IL by ALA, ACRL, importance and necessity of IL in society, application of IL in everyday life, universities and workplace and construct of information literacy - authority is constructed and contextual, information creation as a process, information has value, research as inquiry, scholarship as conversation, searching as strategic exploration.	Will be able to know the concept of information, history of IL, IL and principles of IL,	Class lectures, discussion, concept mapping, visualizations.	Question-answer Quiz
2	**IL types, theory and framework, guidelines:** Types of information literacy including media, computer, ICT and other literacies. Different theories including Seven pillar (SCONUL), Seven faces, ACRL framework, UNESCO and IFLA.	Will understand the models, frameworks and guidelines of IL	Assignment, presentation, Q and A session	Quiz
3	**IL, digital society and digital literacy:** Application of digital literacy, digital literacy tools,	Will know the competencies of digital literacies,	Group discussion, homework,	Assignment

	how to reduce digital divide, importance of digital literacy, online footage, information security and other related areas.	spot fake news and others.	Q&A session	
4	**IL, ethical use and library:** Ethical use of information under the copyright, Intellectual Property Right (IPR), Creative Commons (CC), plagiarism avoiding tools, roles of libraries and librarians to promote IL, IL training session for users.	Will be able to identify the ethical use of information	Lecture, group works PPT presentation	Question-answer Quiz
5	**IL education and consortium:** IL education in school, college and universities, IL training by IFLA, CILIP, ALA and others. IL consortiums, ANZUL, National Forum of IL in the USA, IL in the context of Bangladesh.	Will be able to learn IL courses, form IL forum, and improve awareness of IL	Lecture, group works PPT presentation.	Question-answer Quiz
6	**Practical works and assignment:** Practical aspect of IL in libraries, use of ICT tools, use of fact checking sites, LibGuides on IL, assignment, tutorials and others.	Will be able to design IL LibGuides, use ICT tools for IL related works	Assignment, Group works.	Question-answer Presentation

Summative Assessment: Theoretical Courses

Assessment Type	Assessment Methods	Proportion of Marks
Mid-term Exams	Two mid-term examinations will be held during the course of studies	20
Class Attendance & Participation	Students' attendance as well their participation in class activities will be recorded and marks will be given accordingly	05
Term Paper/Presentation/Quiz	Students will be assigned specific topic for term paper/presentation/quiz by the course teacher	10
Semester Assessment	Final exams consisting of both broad and short questions will be conducted at the end of the course	40

Reading List/Bibliography

Alewine, M.C., 2017. *Introduction to Information Literacy for Students*. John Wiley & Sons, New York

Bruce, C., 1997. *The Seven Faces of Information Literacy*, Auslib, Blackwood

Jacobsen, T., Bobish, G., Bernnard, D., Bullis, D., Hecker, J., Holden, I., Hosier, A. and Loney, T., 2014. *The information literacy user's guide: An open, online textbook*. Open SUNY Textbooks at the State University of New York College, Geneseo.

Taylor, N.G. and Jaeger, P.T., 2021. *Foundations of information literacy*. American Library Association, Chicago

Wilson, C. Grizzle, A. Tuazon, R. Akyempong, K and Cheung, Chi-Kim (2011) *Media and Information Literacy Curriculum for Teachers*, UNESCO, Paris

PMISLM-509: Organization of Knowledge (Cataloguing Theory)

Course Title	**Organization of Knowledge (Cataloguing Theory)**
Course No.	**PMISLM-509**
Credit Hours	**03 Credits**
Brief Description of the Course	A library catalogue is a register of all bibliographic items found in a library or group of libraries. Starting with conceptual analysis the course provides details outlines of library catalogue in traditional and online forms. The major focuses include –conceptual and functional analysis of library catalogue, bibliographical structure of information resources, varied forms and structure of library catalogue, analysis and determination of subject headings and entry headings, and finally concluded with different aspects of online catalogues, such as: OPAC 2.0, MARC, RDA, and FRBR.
Learning Objectives	The major objectives of this course are: • Understand the key concepts of traditional and online catalogue; • Recognize the basic forms and structure of bibliographic items; • Know the arrangement methods & structure of traditional and online library catalogue; • Know, how to analysis and determine the subject matter of bibliographic items; • Know the guidelines for using Sears List of Subject Headings;

Course Details

Unit	Content	Learning Outcomes	Methods & Techniques, Activities
1	**Introduction to Catalogue:** Historical background of Library catalogue; Concept, Definition, Objectives and purposes of Library catalogue; Characteristic and Functions; Qualities of library catalogue; Modern cataloguing codes; Cataloguing tools.	Understand the key concepts of traditional and online catalogue	Class lecture, multimedia presentation, Interactive discussion
2	**Bibliographical structure of a book:** Structure of a printed book; How to read a book from user's point of view? Bibliographic record: Definition, Key elements, Process and steps of creating a bibliographic record; Sources of bibliographic description; Catalogue vs. bibliography.	Recognize the basic forms and structure of bibliographic items	Class lecture, multimedia presentation, Interactive discussion, participation
3	**Types and forms of Catalogue:** Inner and Outer forms of library catalogue; Types of inner and outer forms; Shared or Union catalogue, functions, types.	Understand the basic forms of traditional catalogue	Class lecture, multimedia presentation, and interactive discussion
4	**Structure of catalogue:** Basic skeleton of a card catalogue; Types of information included in library catalogue; Access points and Catalogue entries; Types of catalogue entries, Criteria for choosing main entries of bibliographic items; Filing, rules for filling catalogue entries	Know the arrangement methods, structure and types of entries of traditional catalogue	Class lecture, multimedia presentation

5	**Subject headings and Entry heading:** Subject analysis, Steps to subject analysis; Subject headings: definition, types and forms of subject headings; Steps to assign subject headings; Principles of choosing subject headings; Types of Subdivisions and their use in constructing subject headings; Rules for making entry under Oriental Muslim, Buddhist and Hindu names.	Know, how to analysis and determine the subject matter of bibliographic items	Class lecture, multimedia presentation, Group practice
6	**Computerized and Online Catalogue:** Definition, Importance of computerized catalogue; OPAC: Historical transition, Generation, Definition, Functions; OPAC 2.0: Definition, Functions and Features; MARC: definition, formats and structure; Sections of MARC tags and fields, frequently used tags and fields; FRBR, concepts, user tasks, FRBR ER model; RDA: concept, features; Why was RDA developed?; Changes over AACR2	Know the formats and structure of online catalogue	Class lecture, multimedia presentation, Visualization

Summative Assessment: Theoretical Courses

Assessment Type	Assessment Methods	Proportion of Marks
Mid-term Exams	Two mid-term examinations will be held during the course of studies	20
Class Attendance & Participation	Students' attendance as well their participation in class activities will be recorded and marks will be given accordingly	05
Term Paper/Presentation/Quiz	Students will be assigned specific topic for term paper/presentation/quiz by the course teacher	10
Semester Assessment	Final exams consisting of both broad and short questions will be conducted at the end of the course	40

Reading List / Bibliography

Hossain, Muhammad Jaber, 2023. *A Textbook of Cataloguing: Theory and Practice*. iSAPT Publications, Dhaka.

Saiful Islam, K.M., 2008. *Essentials of Cataloguing and Classification*. New Progoti Prokashoni, Dhaka.

Welsh, Anne and Batley, Sue, 2012. *Practical Cataloguing: AACR, RDA and MARC 21*. Facet Publishing, UK.

Gopal, Krishan, 2005. *Library online cataloguing in digital way*. 1st edition. Author Press, Delhi.

Taylor, A. G. and Joudrey, D. N. 2009. *The Organization of Information*. 3rd edition. Libraries Unlimited, Westport, Conn.

PMISLM-510: Automation of Information Institutions

Course Title	**Automation of Information Institutions**
Course No.	**PMISLM-510**
Credit Hours	**03 Credits**
Brief Description of the Course	By using new and emerging techniques and technologies, libraries have been trying to make the best of their limited resources, while striving to stay relevant in this fast-paced world. By providing the students with a comprehensive understanding of modern technologies used in libraries, this course enables them to emerge as skilled and competent information professionals of the 21st century. The topic covers the integrated library management system and its pros and cons to ensure successful implementation of automation project in library and information institutions. It also touches upon data standard and network consideration for automation. Students will also get familiar with the ongoing trends of library automation in home and abroad.
Learning Objectives	The major objectives of this course are: • To strengthen the theoretical and applied knowledge and skills of the students on automation of libraries and information centers. • To help students realize the technical, managerial, and general aspects of automation. • To equip students with practical knowledge and skills for implementing library automation projects. • To familiarize the students with the current and emerging trends of library automation as well as the issues that are influencing automation of information institutions in Bangladesh.

Course Details

Unit	Content	Learning Outcomes	Methods & Techniques, Activities
1	**Fundamentals of automation of information institutions**: Introduction to automation; Origin and development of library automation; Need for and barriers to library automation, Selection of l software; Automation cost factors; Library automation activities; Request for Proposal and selection of library systems.	Students will understand the basics of automation, and identify hardware and software requirements for library automation	Class lecture, multimedia presentation, Interactive discussion
2	**Introduction to integrated library systems (ILS):** Key features of Integrated Library Systems; Open source and proprietary systems; Core modules and add-ons of ILSs; Major proprietary and open-source ILSs.	Students will understand the basics of ILSs along with modules and file structures; Recognize the features of major proprietary and open-source ILSs.	Class lecture, multimedia presentation, Visualization
3	**Major modules of ILS:** Functions of Acquisition, Cataloging and Circulation modules; File structure; Key considerations for designing Acquisition, Cataloguing and Circulation modules.	Students will be able to conceptualize the functionalities of acquisition, cataloguing and circulation modules along with file structure.	Class lecture, multimedia presentation, Interactive discussion, practice

4	**Other modules of ILS:** Functions of OPAC and Serials Control modules; File structure; Key considerations for designing OPAC and Serials Control modules. Functions and key features of Administration, and Authority Control module; Electronic Resource Management; Media Management and other add-on modules	Students will get hands-on knowledge on optional modules and add-ons available in ILS.	Class lecture, multimedia presentation, Interactive discussion, practice
5	**Data standards and Networking considerations for automation:** Introduction to major data standards for automation; MARC, Z39.50, Dublin Core; Networking requirements for library automation; Cooperative initiatives for library automation.	Students will be able to conceptualize major data standards related to library automation and identify techniques for cooperative efforts in library automation.	Class lecture, multimedia presentation, Visualization
6	**Trends of library automation in Bangladesh and abroad:** Current and future trends in automation; Automated and digital reference services; Web 2.0 and library automation. Case studies on the automation of selected library and information centers in Bangladesh.	Students will identify current and future trends of library automation in Bangladesh	Class lecture, multimedia presentation Tour

Summative Assessment: Theoretical Courses

Assessment Type	Assessment Methods	Proportion of Marks
Mid-term Exams	Two mid-term examinations will be held during the course of studies	20
Class Attendance & Participation	Students' attendance as well their participation in class activities will be recorded and marks will be given accordingly	05
Term Paper/Presentation/Quiz	Students will be assigned specific topic for term paper/presentation/quiz by the course teacher	10
Semester Assessment	Final exams consisting of both broad and short questions will be conducted at the end of the course	40

Reading List / Bibliography

Aswal, R. S. (2006) *Library Automation for 21st Century*, New Delhi: Ess Ess Publications.

Bilal, D. (2014) *Library Automation: Core Concepts and Practical Systems Analysis,* Libraries Unlimited

Haravu, L. J (2007) *Library Automation: Design Principles and Practices*, New Delhi: Allied Publishers.

Mishra, Vinod Kumar (2016) *Basics of Library Automation, KOHA Library Management Software and Data Migration: Challenges with Case Studies,* New Delhi: Ess Ess Publications.

Tramullas, J. (Ed.). (2012). *Library Automation and OPAC 2.0: Information Access and Services in the 2.0 Landscape: Information Access and Services in the 2.0 Landscape*. IGI Global.

হক, কাজী মোস্তাক গাউসুল (২০১৭) *তথ্যপ্রতিষ্ঠানের স্বয়ংক্রিয়করণ* (৩য় সংস্করণ), ঢাকা: নলেজ রেইন।

3rd Semester

PMISLM-511: Information Networking and Resource Sharing

Course Title	**Information Networking and Resource Sharing**
Course No.	**PMISLM-511**
Credit Hours	**03 Credits**
Brief Description of the Course	The world is witnessing unprecedented explosion of information, which is making it increasingly challenging for users and library professionals to keep track of information in various fields of knowledge. This has prompted the libraries and information centres to share their resources as well as their infrastructures to cater to the needs of the users. This has been done with the help of networking and resource sharing among the information providing organizations through gainful use of technologies. The course helps learners build their knowledge and skills-base about information networking and resource sharing by familiarizing themselves with relevant tools and techniques. The course will equip them with a solid understanding of the national and international scenarios as well as the future trends in the arena of information networking and resource sharing.
Learning Objectives	The major learning objectives of this course are: • To familiarize students with the key concepts of information networking and resource sharing in a changing time. • To help students attain required knowledge, skills and awareness for managing resource sharing and networking operations in libraries and information centres. • To develop students' awareness of the national and international reality in networking and resource sharing so that they can emerge as competent LIS professionals.

Course Details

Unit	Content	Learning Outcomes	Methods & Techniques, Activities	Assessment Tools/ Procedures
1	**Fundamentals of library cooperation and library resource sharing:** Historical growth and development of library cooperation and resource sharing; Reasons and importance of library cooperation and resource sharing; Fields of library cooperation and resource sharing; Objectives, functions and activities of information resource sharing.	• Gain a comprehensive understanding of the basics of resource sharing. • Attain conceptual clarity on the key issues related to resource sharing.	Class lectures, discussion, Question-answer	Question-answer Quiz
2	**Components of information resource sharing:** Components of information resource sharing; Role of union catalogue in information resource sharing,	• Identify the core components of library resource sharing. • Learn about the necessary preconditions of library resource	Class lecture, Presentation, Question-answer	Quiz

	institutional repository; Agreement required for information resource sharing; Barriers and influencing factors of resource sharing.	sharing. • Understand the functionalities and importance of union catalog and other collaborative exercises.		
3	**Tools and techniques of library and information networks:** Definition of library and information network; Tools and logical techniques of library and information network; Role of multimedia in library and information network.	• Get familiarized with the techniques of resource sharing. • Understand the usage and applications of resource sharing tools and apparatus.	Class lecture, Quiz, Question-answer	Assignment
4	**Resource sharing in an automated environment:** Factors to be considered for establishing library and information network, computer network, on-line network; Reasons for promoting resource sharing through automated network; Benefits of computer-based library and information network.	• Understand the relevant tools and technologies for resource sharing. • Attain skills and competencies for managing resource sharing operations in an automated environment.	Class lecture, Assignment, Presentations	Question-answer Quiz
5	**Types and configuration of library and information networks:** Types of library and information network; Configurations of library and information network, role of internet and e-mail in library and information network.	• Gain a solid understanding about the necessary configurations of information networking. • Learn about the technological aspects of establishing information network.	Class lectures, discussion, Question-answer	Question-answer Quiz
6	**Current and future trends in library and information network:** Programs of library and information network, library consortia and models and benefits of e-journal consortia; National and international library and information networks; Inter library loan code; Prospects and problems of library and information networking in Bangladesh.	• Get practical insights into the current and future trends in networking and resource sharing. • Learn about the international initiatives in networking and resource sharing.	Assignment, Group works, Presentation, Formal and informal evaluation	Question-answer Presentation

Summative Assessment: Theoretical Courses

Assessment Type	Assessment Methods	Proportion of Marks
Mid-term Exams	Two mid-term examinations will be held during the course of studies	20
Class Attendance & Participation	Students' attendance as well their participation in class activities will be recorded and marks will be given accordingly	05
Term Paper/Presentation/Quiz	Students will be assigned specific topic for term paper/presentation/quiz by the course teacher	10
Semester Assessment	Final exams consisting of both broad and short questions will be conducted at the end of the course	40

Reading List/Bibliography

Kaul, H. K. (1999). *Library resource sharing and networks.* New Delhi: Virgo Publications.

Kent, A. and Galvin, T. J. (eds.). (1977). *Library resource sharing.* New York: Marcel Dekker.

Kesselman, M. A. and Weintraub, I. (eds.) (2004). *Global librarianship.* 4th ed. New York: Marcel Dekker Inc.

PMISLM-512: Information Retrieval Techniques

Course Title	**Information Retrieval Techniques**
Course No.	**PMISLM-512**
Credit Hours	**03 Credits**
Brief Description of the Course	The course offers a comprehensive understanding of the principles, procedures, and technologies associated with efficient information storage and retrieval. It equips students with essential skills to access and retrieve information from a wide array of online databases and resources. Students will develop a deep understanding of the search techniques necessary to retrieve information to ensure the delivery of relevant, accurate and timely information to users.
Learning Objectives	The major objectives of this course are: • To develop a deep understanding of the fundamental principles, methodologies, and technologies underpinning information retrieval techniques; • To acquire essential skills to effectively access, search, and retrieve information from various online databases and resources; and • To formulate search queries and utilize search techniques that ensure the retrieval of information that is both accurate and highly relevant to specific user needs.

Course Details

Unit	Content	Learning Outcomes	Methods & Techniques, Activities
1	**Introduction to information retrieval:** Overview of information retrieval systems, basic concepts such as documents, queries, and relevance, tasks and challenges involved in retrieving information from large databases and search systems.	Students will be able to describe the basic concepts, principles, methodologies, and technologies underlying information retrieval systems.	Class lectures, group discussions, hand-on exercises
2	**Indexing techniques:** Indexing techniques including inverted files, term weighting schemes like TF-IDF, index compression techniques.	Students will be able to design and implement indexing techniques for efficient information retrieval.	Programming assignments, collaborative projects, code review sessions
3	**Retrieval models:** Different retrieval models such as Boolean retrieval, the vector space model, and probabilistic retrieval models.	Students will be able to analyze different retrieval models and understand their strengths and weaknesses.	Class lectures, homework, presentation, Q&A session
4	**Querying and search strategies:** Querying and search strategies, query processing, parsing, expansion techniques, relevance feedback.	Students will be able to develop the skills necessary to access, retrieve, and manage information from diverse online databases and resources.	Class lectures, practical exercises
5	**Retrieval performance evaluation:** Retrieval performance evaluation metrics including recall, precision, F1 score, R-precision, average precision, mean average precision, b-pref, and DCG.	Students will be able to evaluate the performance of information retrieval systems using appropriate evaluation metrics.	Class lectures, group discussions, hands-on exercises

6	**Advanced topics in information retrieval:** Advanced topics such as web search results, PageRank algorithms, multimedia retrieval techniques, and natural language processing for information retrieval.	Students will be able to apply advanced techniques such as web search algorithms, multimedia retrieval, and natural language processing to information retrieval problems.	Class lectures, assignments, problem-solving sessions

Summative Assessment: Theoretical Courses

Assessment Type	Assessment Methods	Proportion of Marks
Mid-term Exams	Two mid-term examinations will be held during the course of studies	20
Class Attendance & Participation	Students' attendance as well their participation in class activities will be recorded and marks will be given accordingly	05
Term Paper/Presentation/Quiz	Students will be assigned specific topic for term paper/presentation/quiz by the course teacher	10
Semester Assessment	Final exams consisting of both broad and short questions will be conducted at the end of the course	40

Reading List / Bibliography

Manning, C. D., Raghavan, P., & Schütze, H. 2008. *Introduction to information retrieval*. Cambridge University Press, Cambridge, England.

Baeza-Yates, R., & Ribeiro-Neto, B. 1999. *Modern information retrieval*. Addison-Wesley. ACM Press, New York.

Hersh, W. 2020. *Information retrieval: a biomedical and health perspective*. Springer, Cham, Switzerland.

Rowley, J. E., & Farrow, J. 2019. *Organizing knowledge: introduction to access to information*. Routledge, London.

PMISLM-513: Digital Library Systems

Course Title	**Digital Library Systems**
Course No.	**PMISLM-513**
Credit Hours	**03 Credits**
Brief Description of the Course	This course is introduced to orient students with the concept of Digital library system (DLS). The course focuses on the conceptual, practical, as well as technical issues related to digital library system. The in-depth overview of the course include the design of digital libraries, issues related to collection development, management, and disseminating the digital resources, metadata, interactive user interfaces, user experience in the semantic web, and evaluation.
Learning Objectives	• To gain clear understanding on the concept of digital libraries by learning features, components, perspectives, and challenges associated with digital library systems. • To demonstrate an understanding of the digitization processes, and various approaches and techniques to evaluate digital libraries. • To gain knowledge on various DL and institutional repository software, metadata structures, and DL interoperability.

Course Details

Unit	Content	Learning Outcomes	Methods & Techniques, Activities	Assessment Tools/ Procedures
1	**Introduction to DL:** Overview, concept, historical perspective of DL; DL related terms and their interrelationship; major perspectives and categories, components, benefits, and challenges of DL.	Will be able to know the concept, history, categories, components, benefits, and challenges of DL.	Class lectures, discussion, concept mapping, visualizations.	Question-answer Quiz
2	**Digital Objects and Content Creation** Digital Objects and DOI; Content creation - electronic documents, files and file formats; Study of different file formats- JPEG, MPEG, GIF, TIFF and PDF; Born digital and legacy documents; Creating web content; Digitization-scanning, OCR	Will understand the processes of digitizing content.	Assignment, presentation, Q and A session	Quiz
3	**DL Design, Framework and Architecture** Elements of DL, DL frameworks and models; DL design issues and principles; Institutional Repository (IR) architecture; Standards, protocols, interoperability and security of DL;	Will know existing models and frameworks of DL, how to design and evaluate a DL, IR standards, and the security issues.	Group discussion, homework, Q&A session	Assignment

	Evaluation of DL.			
4	**Content Organizations and Knowledge Management** Information architecture (e.g., hypertext, hypermedia), Metadata, Ontologies, classification, categorization, Subject description, vocabulary control, Content and knowledge management (KM) systems in digital space.	Will be able to create metadata, organize content and manage knowledge in digital space.	Lecture, group works PPT presnt.	Question-answer Quiz
5	**User Interfaces and Access to Digital Libraries** Resource discovery and searching; User Interface (UI) design; Information visualization; access management to in-house and networked resources.	Will be able to learn how to design user-friendly UI, use resource discovery tools, protocol for sharing information	Lecture, group works PPT presnt.	Question-answer Quiz
6	**Various DL software:** key features of various DL and institutional repository software, practical aspects and considering issues of different DL software.	Will be able to know a wide range of features offered by different DL software.	Assignment, Group works.	Question-answer Presentation

Summative Assessment: Theoretical Courses

Assessment Type	Assessment Methods	Proportion of Marks
Mid-term Exams	Two mid-term examinations will be held during the course of studies	20
Class Attendance & Participation	Students' attendance as well their participation in class activities will be recorded and marks will be given accordingly	05
Term Paper/Presentation/Quiz	Students will be assigned specific topic for term paper/presentation/quiz by the course teacher	10
Semester Assessment	Final exams consisting of both broad and short questions will be conducted at the end of the course	40

Reading List/Bibliography

Chowdhury, G.G., & Chowdhury, S. (2003). *Introduction to digital libraries.* Facet Publishing.

Andrews, J., & Law, D. (Eds.). (2004). *Digital libraries: policy, planning and practice.* Routledge.

Theng, Y.L., Foo, S., Goh, D., & Na, J.C. (Eds.). (2009). *Handbook of research on digital libraries: design, development, and impact.* Information Science Reference.

PMISLM-514: Research Methodology and Statistics

Course Title	**Research Methodology and Statistics**
Course No.	**PMISLM-514**
Credit Hours	**03 Credits**
Brief Description of the Course	This course is aimed to provide a systematic examination of the research paradigm from a more generative approach, with a particular emphasis on information and knowledge. It is expected to provide them with a particular plan to follow during their investigation. In other words, It allows them to document what they intend to achieve with the research from the outset. The methodical study of problem definition and identification, hypothesis formulation, proper methodology selection, fact-finding and data collection, analysis, and conclusion-making are all included in this course. This course is to learn how research is being done, and to put that knowledge into practice. Apart from this, this particular course also focuses on enhancing students' quantitative ability by incorporating some basic concepts of applied statistics.
Learning Objectives	The major objectives of this course are: • To demonstrate proficiency in the use of selected research methods and tools, • To help students to select and define appropriate research problem, organize and conduct research, • To analyze an event, process or phenomenon to find out solutions to scientific, nonscientific and social problems, • To write a research proposal, engage in independent studies, and work collaboratively. • To demonstrate the use of introductory statistics in research.

Course Details

Unit	Content	Learning Outcomes	Methods & Techniques, Activities
1	**Introduction to research**: historical growth and development of research; Research objectives, types and significance, criteria of good research and research in library and information science; research theory, epistemology, subjectivity, objectivity, positivist, inductive and deductive reasoning and others.	To understand and conceptualize research; know different Issues related to research; Identify the research pattern.	Class lecture, multimedia presentation, Interactive discussion
2	**Research problem and design:** Problem statement, key components of the problem statement, steps in problem identification, formulation of a problem; Necessity of research design (RD); Features of good design, different types of RD.	Able to measure the research problem; get the knowledge to construct research design;	Class lecture, multimedia presentation, Interactive discussion, participation
3	**The Research Process:** The whole research process in brief with a specific focus on methods and methodology; research question, literature review, research method, sampling strategy, data collection and analysis, report	Understand different components of research, able to compare, choose and justify different research approach.	Class lecture, multimedia presentation, and interactive discussion

	writing, etc., Qualitative, quantitative and mixed methods.		
4	**Sampling, Data collection and analysis:** Necessity of sampling in research, sampling frame and procedure, types of sampling, e.g., probability and non-probability sampling. Data collections instruments; questionnaire-closed and open format questions; Criteria for designing questionnaire, interviews- structured, semi structured, unstructured, survey, observation and participation. Data analysis techniques; quantitative data analysis in SPSSS (optional).	Able to analyze, formulate, and examine the sampling process; know different techniques of data collection and analysis	Class lecture, multimedia presentation, lab, problem solving sessions
5	**Research Ethics:** Basic principles of ethics in research, importance of ethics, institutional review board (IRB); Research misconduct–Fabrication, Plagiarism in research, referencing styles e.g., Harvard, APA, MLA and Chicago.	To understand different constraints of research ethics, able to describe, compare and identify the plagiarism.	Class lecture, multimedia presentation, group discussion
6	**Introductory and basic Statistics:** Meaning and functions of statistics; Scope and limitations of statistical use; Importance and applications of statistics in library and information systems. Frequency distribution; Measures of central tendency-arithmetic mean, median, mode; Measures of dispersion-range, quartile deviation, mean deviation, standard deviation; Correlation and its types-positive and negative, simple, partial and multiple, linear and non-linear correlation; Regression analysis, simple and multivariate regression (these topic may vary depend on the students initial background).	Know the fundamental basic of statistics and its application to research.	Class lecture, multimedia presentation, Visualization, lab (optional)

Summative Assessment: Theoretical Courses

Assessment Type	Assessment Methods	Proportion of Marks
Mid-term Exams	Two mid-term examinations will be held during the course of studies	20
Class Attendance & Participation	Students' attendance as well their participation in class activities will be recorded and marks will be given accordingly	05
Term Paper/Presentation/Quiz	Students will be assigned specific topic for term paper/presentation/quiz by the course teacher	10
Semester Assessment	Final exams consisting of both broad and short questions will be conducted at the end of the course	40

Reading List / Bibliography

Bhattacherjee, A. (2012) *Socia*l *Science Research: Principles, Methods, and Practices*, University of South Florida, Tampa, Florida, USA.

J. W., & Creswell, J. D. (2017) *Research design: Qualitative, quantitative, and mixed methods approaches*. London: Sage.

Patten, M. L., & Newhart, M. (2017). *Understanding research methods: An overview of the essentials*, Taylor & Francis.

Walliman, N. (2017). *Research methods: The basics*, NY: Routledge.

Weber, M. (2017) *Methodology of social sciences*. NY: Routledge.

Malec, M. (2018) *Essential statistics for social research*. Routledge

Gupta, S.P. and Gupta, M.P (2015) *Business statistics*. Sultan Chand & Sons

PMISLM-515: Organization of Knowledge – (Classification Practical)

Course Title	**Organization of Knowledge (Classification Practical)**
Course No.	**PMISLM-515**
Credit Hours	**03 Credits**
Brief Description of the Course	This course introduces learners to the principles and practices of knowledge organization through the study of major library classification schemes with special references to Dewey decimal classification (DDC), Universal Decimal Classification Scheme (UDC), and Library of Congress (LC) schemes. Also emphasize on number analysis process using DDC and UDC.
Learning Objectives	• This course is designed to give practical knowledge about the number building process using six tables of DDC 23rd edition; • Prepare and analyze the DDC numbers for building appropriate titles and forms; • Understand the basic practical outlines about UDC; • Learn the number analysis process using common and special auxiliaries of UDC; • Prepare classification number for subjects and titles using LCC;

Course Details

Unit	Content	Learning Outcomes	Methods & Techniques, Activities	Assessment Tools/ Procedures
1	**Number building process using six (6) tables of DDC 23rd edition:** Table 1: Standard subdivision; Table 2: Geographic areas, historical periods, persons; Table 3: Subdivisions for the arts, for individual literatures, for specific literary forms; Table 4: Subdivisions of individual languages and language families; Table 5: Ethnic and national groups; Table 6: Languages.	Students will be able to know about the preliminary ideas of practical classification, number building process using six tables of DDC 23rd edition.	Class lecture, multimedia presentation, Interactive discussion, Hands on practice	Question-answer Quiz
2	**Number building process:** Number building process using main classes in the schedule.	Students will learn the number building process using different main classes in the schedules.	Class lecture, multimedia presentation, Interactive discussion, Hands on practice	Quiz
3	**Number analysis using Six (6) tables of DDC 23rd edition:** Table 1: Standard subdivisions; Table 2: Geographic areas, historical periods, persons; Table 3: Subdivisions for the arts, for individual literatures, for specific	Students will practically learn the number analysis systems using six tables of DDC 23rd edition for building appropriate titles and forms.	Class lecture, multimedia presentation, and Hands on practice	Assignment

	literary forms; Table 4: Subdivisions of individual languages and language families; Table 5: Ethnic and national groups; Table 6: Languages.			
4	**Number analysis:** Number analysis of using main classes in the schedules.	Students will also learn the number analysis process using main class to main class for finding appropriate titles and forms.	Class lecture, multimedia presentation, Hands on practice	Question-answer Quiz
5	**Universal decimal classification (UDC):** Construction of classification numbers with various auxiliaries, Number analysis**.**	Students will learn the construction of classification numbers with various common, special auxiliaries and learn number analysis system using UDC auxiliaries.	Class lecture, multimedia presentation, Hands on practice	Question-answer Quiz
6	**Library of Congress classification (LCC):** Construction of classification numbers.	Students will learn construction of classification number using LCC which have already been built up.	Class lecture, multimedia presentation, Hands on practice	Question-answer Presentation

Summative Assessment: Practical Courses

Assessment Type	Assessment Methods	Proportion of Marks
Mid-term Exams	Two mid-term examinations will be held during the course of studies	20
Class Attendance & Participation	Students' attendance as well their participation in class activities will be recorded and marks will be given accordingly	05
Term Paper/Presentation/Quiz	Students will be assigned specific topic for term paper/presentation/quiz by the course teacher	10
Semester Assessment	Final exams consisting of both broad and short questions will be conducted at the end of the course	40

Reading List/Bibliography

Dewey, Melvil. (2011). *Dewey Decimal Classification and Relative Index,* 23rd edition, OCLC publications.

Mills, J. (1973). *A modern outline of library classification*. London: Chapman & Hall.

Saiful-Islam, K.M. *Number building in Dewey decimal classification: 19th and 16th eds. a practical manual.*

Sayers, W. C. B., &Maltby, A. (1967).*A manual of classification for librarians*. London: Deutsch.

মুন্সী, এম. নাসিরউদ্দিন (২০১৪)। *মৌলিক শ্রেণীকরণ* (১ম সংস্করণ)। ঢাকা: জাহিন-সামিন প্রকাশনী।

PMISLM-516: Organization of Knowledge (Cataloguing Practical)

Course Title	**Organization of Knowledge (Cataloguing Practical)**
Course No.	**PMISLM-516**
Credit Hours	**03 Credits**
Brief Description of the Course	A library catalogue is a register of all bibliographic items found in a library or group of libraries. Starting with conceptual analysis about the practical issues of library catalogue the course provides details outlines of practical library cataloguing. The major focuses include – forms and formats of different kinds of entries, preparation of main entries under personal author, entries for the items of more than three authors, preparation of added entries, preparation of entries under corporate bodies, preparation of entries for collaborated items, preparation of entries under MARC format.
Learning Objectives	• Understand the basic practical outlines of cataloguing bibliographic items in traditional and online formats; • Prepare catalogue entry for the works of single, double, triple, and more than triple authors; • Prepare catalogue entry for the edited and compile works, and the works collaborated by different authors; • Assign subject heading of bibliographic items using Sears List of Subject Headings; • Prepare catalogue entry in MARC format using Koha;

Course Details

Unit	Content	Learning Outcomes	Methods & Techniques, Activities	Assessment Tools/ Procedures
1	**Introduction to Cataloguing Practical:** Introducing catalogue Format, Variant entries & their positions, Bibliographic items.	Will be able to know about the preliminary concepts of practical cataloguing, catalogue Formats, Variant entries and their positions, and also the Bibliographic items for preparing catalogue entries.	Multimedia presentation Interactive discussion Hands on practice	Question-answer Quiz
2	**Preparation of Main entry under Personal author and Title:** Entry under single, double and triple authors, retires under title of the work.	Able to know how to prepare Main entry under single, double and triple authors; and the preparation of entries under title of the work.	Multimedia presentation Interactive discussion Hands on practice	Quiz
3	**Making entry for collaborated works:** Entries for translated works, entries for revisers, illustrators, and compilers.	Students will able to know how to prepare entries for translated works; and entries for revised, illustrated, and compiled works.	Multimedia presentation Interactive discussion Hands on practice	Assignment

4	**Making entries under corporate bodies:** Entries under corporate body.	Students will know about the preparation of entries under corporate body.	Multimedia presentation Interactive discussion Hands on practice	Question-answer Quiz
5	**Preparation of Added entries:** Preparation of entries under joint **a**uthors, title and Subject added entries.	Will be able to know how to prepare added entries under joint **a**uthors, title and Subject headings.	Multimedia presentation Interactive discussion Hands on practice	Question-answer Quiz
6	**Preparation of entry in MARC format using Koha:** Copy cataloguing using Z39.50, Creating records in MARC format.	Students will know how to Copy cataloguing using Z39.50, and Creating records in MARC format.	Multimedia presentation Interactive discussion Hands on practice	Question-answer Presentation

Summative Assessment: Practical Courses

Assessment Type	Assessment Methods	Proportion of Marks
Mid-term Exams	Two mid-term examinations will be held during the course of studies	20
Class Attendance & Participation	Students' attendance as well their participation in class activities will be recorded and marks will be given accordingly	05
Term Paper/Presentation/Quiz	Students will be assigned specific topic for term paper/presentation/quiz by the course teacher	10
Semester Assessment	Final exams consisting of both broad and short questions will be conducted at the end of the course	40

Reading List / Bibliography

Hossain, Muhammad Jaber, 2023. *A Textbook of Cataloguing: Theory and Practice*. iSAPT Publications, Dhaka.

Independent evaluation by examiners

The research monograph will be assessed by two independent examiners based on the following criteria:

Originality and significance of the research	:	10 marks
Depth and breadth of literature review	:	10 marks
Methodological rigor	:	10 marks
Analysis and discussion of findings	:	15 marks
Conclusion and recommendations	:	10 marks
Presentation and Formatting	:	10 Marks
Adherence to the monograph structure	:	5 marks
Proper citation and referencing	:	5 marks
Total	**:**	**75 marks**

The final score will be calculated as the average of the two examiners' marks, ensuring fairness and objectivity in the evaluation process.