

UNIVERSITY OF DHAKA



Proposed Course Curricula for the Department of Information Science and Library Management
for
MA
for the
Session: 2023-2024

Proposed Course Curricula for MA
 Department of Information Science and Library Management
 Sessions: 2023-2024
 (Semesters: 1st & 2nd)

Course No.	Course Title	Full Marks
MA 1st Semester		
MISLM 501	Digital Library Systems	100
MISLM 502	Information Retrieval Techniques	100
MISLM 503	Information Literacy	100
MISLM 504	Internet Studies and Web Design	100
	Viva voce	25
[4 full units and 1 partial unit = 17 credits]		
MA 2nd Semester		
MISLM 505	Advanced Classification Practical	50
MISLM 506	Advanced Cataloguing Practical	50
MISLM 507	Knowledges Management	100
MISLM 508	Development and Customization of Library Management Software	100
MISLM 509	Library Systems and Services	100
Alternative		
MISLM 510	Thesis (Students having and above CGPA of 3.25 will be eligible for taking MISLM 510 [Thesis]) (Thesis Marks distribution: Thesis 75 (Marks by Examiners), Defence 25 [Marks by Exam committee]. Defence will be conducted by concerned examination committee.	100
	Viva voce	25
[3 full units, 2 half units and 1 partial unit = 17 credits]		

1st Semester
MISLM 501: Digital Library Systems [100]

Course Title	Digital Library Systems
Course No.	MISLM 501
Credit Hours	4 Credit, 60 Hours
Brief Description of the Course	This course introduces the underlying concepts, theories, issues, tools and technologies constituting the basis of digital libraries. The goal of this course is to provide students with the theoretical and practical knowledge required to understand the processes and techniques involved in creating, organizing, presenting, and using information in digital environments.
Learning Objectives	<p>The specific objectives of this course are:</p> <ul style="list-style-type: none"> • To understand the underlying concepts and major issues constituting the basis of digital libraries. • To develop an understanding of the issues and principles of designing DL based on existing frameworks, models and standards. • To gain practical knowledge for building and maintaining digital collections using open source software such as GSDL, DSpace, etc. • To understand the issues related to management, maintenance and evaluation of digital collections. • To understand the emerging tools, technologies and systems associated with DL.

Course Details

Unit	Content	Learning outcomes	Methods & technique, activities	No. of hours (60)	Assessment tools/ procedures
1	Overviews of digital libraries (DL): Concepts of digital library (DL); Evolution and historical growth of DL; categories, features, perspectives, advantages and disadvantages of DL; DL vs traditional libraries; DL and its relation to automated, electronic and virtual libraries.	Conceptualize digital library and its historical background	<ul style="list-style-type: none"> • Class lecture • Concept mapping 	5	<ul style="list-style-type: none"> • Concept mapping test
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.	Demonstrate skills in working with digital objects	<ul style="list-style-type: none"> • Class lecture • Problem-solving exercises 	7	<ul style="list-style-type: none"> • Quiz
3	DL design, framework & architecture: Elements of DL, DL frameworks and models; DL design issues and principles; Repository architecture; Standards, protocols, interoperability and security of DL.	Understand the issues and principles related to DL design.	<ul style="list-style-type: none"> • Class lecture • Interactive and group discussion • Problem-solving exercises 	7	<ul style="list-style-type: none"> • Written test on Unit 1-3
4	Content organizations in the digital space: KOS, ontology and topic maps, Information architecture (e.g., hypertext, hypermedia), metadata, classification, categorization, subject description, vocabulary control, thesauri, terminologies, etc.	Know how to organize content and information in digital environment	<ul style="list-style-type: none"> • Class lecture • Assignment • Brainstorming 	6	<ul style="list-style-type: none"> • Presentation
5	DL software: Open source software (OSS),	Understand the	<ul style="list-style-type: none"> • Class lecture 	6	<ul style="list-style-type: none"> • Question

Unit	Content	Learning outcomes	Methods & technique, activities	No. of hours (60)	Assessment tools/ procedures
	proprietary software, free software and public domain software (PDS); Various software for digitization, repository building and content management.	features of various software related to DL	<ul style="list-style-type: none"> Problem-solving exercises 		<ul style="list-style-type: none"> -answer Assignment
6	Access and utilization of digital libraries: Resource discovery and searching, interface design, search and access interfaces, information visualization; Access management to in-house and networked resources; Reference work in digital environment; DL services; DL users, usability and use studies.	Apply DL tools and technologies for effective discovery, access, and use of DL's content and services.	<ul style="list-style-type: none"> Class lecture DL visit/tour 	7	<ul style="list-style-type: none"> Quiz
7	Management and evaluation: Management of DLs; Project management, research projects in DLs; E-resources management; Access control and DRM, security and preservation issues- legal, ethical, economic, social and human factors; Managing emerging trends in DL: new skills and competencies for digital librarians; DL evaluation.	Address legal, ethical, economic, and social issues and challenges associated with DL.	<ul style="list-style-type: none"> Class lecture DL visit/tour 	7	<ul style="list-style-type: none"> Written test on Unit 4-7
8	DL applications (practical): Making E-books, e-dissertations, e-prints, e-journals and other digital documents; E-publishing; Hands-on practice in building and managing repository/DL using freely available DL software e.g. Dspace, Greenstone, Fedora, etc.	Build and maintain digital collections by using and customizing various DL and repository software	<ul style="list-style-type: none"> Hands-on-practice in lab Individual and Group Project 	15	<ul style="list-style-type: none"> Lab test

Summative Assessment: Theoretical and Practical Courses

Assessment Type	Assessment method(s)	Proportion of Marks
Mid-term Exams	Two written tests on theoretical aspects One hands-on practice/project in lab	20% 10%
Class Attendance/Participation	Presentations, quiz, group discussions, problem-solving exercises, assignments, etc	10%
Semester Assessment	Written test on theory	40%
	Practical examination (Lab work)	20%

Reading List

- Arms, W. Y. (2000). *Digital Libraries*. Cambridge, MA: The MIT Press.
- Calhoun, K. (2014). *Exploring Digital Libraries: Foundations, Practice, Prospects*. ALA Neal-Schuman
- Chowdhury, G. G. & Chowdhury, S. (2003). *Introduction to Digital Libraries*. London: Facet.
- Lesk, M. (2005). *Understanding Digital Libraries* (2nd ed.). San Francisco, CA: Morgan Kaufman Publishers.
- Rudasill, L.M. & Ortiz, M.E.D. (Eds). (2013). *Open Access and Digital Libraries: Social Science Libraries in Action (IFLA Publications)*. Walter de Gruyter.
- Tedd, L.A. & Large, J.A. (2005). *Digital Libraries: Principals and Practice in a Global Environment*. Walter de Gruyter.
- Theng, Y. L., Foo, S., Goh, H. L. D. & Na, J. C. (2009). *Handbook of Research on Digital Libraries: Design, Development and Impact*. IGI Global.
- Tsakonas, G. & Papatheodorou, C. (2009). *Evaluation of Digital Libraries: An Insight into Useful Applications and Methods*. Chandos Publishing.
- Witten, I.H., Bainbridge, D. & Nichols, D.M. (2009). *How to Build a Digital Library* (2nd ed.). Amsterdam: Morgan Kaufmann

MISLM 502: Information Retrieval Techniques [100]

Course Title	Information Retrieval Techniques
Course No.	BISLM 502
Credit Hours	4 Credit, 60 Hours
Brief Description of the Course	This course presents an introduction to the fundamental concepts and techniques of Information Retrieval. Topics covered: indexing, term frequency and weights, retrieval models; Boolean model, Vector space model, probabilistic model, ranking techniques, search engines, and search evaluation.
Learning Objectives	<ul style="list-style-type: none"> To examine data structures like inverted indices used in Information retrieval systems To understand the basic concepts in information retrieval and the more advanced techniques for retrieving information from various online sources.

Course Details

Unit	Content	Learning outcomes	Methods & technique, activities	No. of hours (60)	Assessment tools/ procedures
1	Concept and background: Introduction to information retrieval; Components of IR systems; Information search process; Types of searches	Understand the concept of information retrieval. Recognize the different components of an IR systems. Analyze the search process and the types of searches.	<ul style="list-style-type: none"> Lecture Question-Answer 	8	<ul style="list-style-type: none"> Quiz Class performance
2	Inverted index: Term vocabulary and posting lists; Tokenization; dropping common words; Stemming and lemmatization	Understand the different techniques for creating index file. Identify vocabulary terms including the dictionary and its posting list. Analyze word stems and stemming rules.	<ul style="list-style-type: none"> Lecture Question-Answer Quiz Assignment 	7	<ul style="list-style-type: none"> Question-answer Class performance
3	Boolean retrieval: Term frequency and weights; Vector space model; Probabilistic retrieval; relevance feedback	Understand Boolean searching including its limitations. Analyze scoring, term weighting and the vector space model	<ul style="list-style-type: none"> Lecture Question-Answer Quiz Assignment 	8	<ul style="list-style-type: none"> Question-answer Class performance
4	Online searching: Choosing sources; Planning and performing the search; Modifying the search; Selecting results; Developing search scenarios; Demonstration and hands-on practice	Understand the steps of online searching. Demonstrate practical knowledge of online searching.	<ul style="list-style-type: none"> Lecture Question-answer Quiz Assignment 	8	<ul style="list-style-type: none"> Quiz
5	Language and information retrieval: Controlled vocabularies; Controlled vocabulary in retrieval; Problems with controlled vocabulary; Natural language alternatives; Expert systems	Analyze free text queries and controlled vocabulary in retrieval Understand natural language processing.	<ul style="list-style-type: none"> Lecture Debate Quiz 	8	<ul style="list-style-type: none"> Oral test Assignment

Unit	Content	Learning outcomes	Methods & technique, activities	No. of hours (60)	Assessment tools/ procedures
6	Browsing and searching: Browsing versus searching; Browsing strategies; Types of browsing; Browsing tools; Advantages of browsing; Browsing limitations.	Analyze the need for browsing. Demonstrate practical understanding of browsing strategies and techniques.	<ul style="list-style-type: none"> Lecture Interactive and group discussion Question-answer 	7	<ul style="list-style-type: none"> Quiz Question-answer
7	Search evaluation: Recall and precision measures; Criticisms of recall and precision measures; accuracy and F-measures; User interfaces and user-centred design and evaluation	Examine the role of recall and precision. search evaluation. Analyze the significance of user-centred design.	<ul style="list-style-type: none"> Lecture Interactive and group discussion Question-answer 	6	<ul style="list-style-type: none"> Quiz Question-answer
8	Web retrieval: Crawling the web, link analysis, importance of ranking, PageRank computation	Understand the features of web crawlers. Comprehend the importance of ranking and ranking mechanisms.	<ul style="list-style-type: none"> Lecture Quiz Presentation 	8	<ul style="list-style-type: none"> Question-answer Mid-term examination

Summative assessment: Theoretical courses

Assessment type	Assessment method(s)	Proportion of marks
Mid-term exams	Two mid-term examinations will be held during the course of studies	30%
Class attendance & participation	Students' attendance as well as their participation in class activities will be recorded and marks will be given accordingly	10%
Semester assessment	Final examinations consisting of both broad and short questions will be conducted at the end of the course	60%

Reading List:

- Chowdhury, G.G. & Chowdhury, S. (2003). *Introduction to digital libraries*. UK: Facet Publishing.
- Hamilton, F. (1995). *Current awareness, current techniques*. UK: Gower.
- Manning, C.D., Raghavan, P. & Schütze, H. (2008). *Introduction to information retrieval*. NY: Cambridge University Press.
- Rowely, J. E. & Farrow, J. (200). *Organizing knowledge: an introduction to managing access to information*. UK: Gower.

MISLM 503: Information Literacy [100]

Course Title	Information Literacy
Course No.	MISLM 503
Credit Hours	4 Credit, 60 Hours
Brief Description of the Course	With unprecedented information explosion taking place in every corner of the globe, people need to develop their understanding and skills for surviving and thriving in the emerging knowledge society. Information literacy prepares them for this role. This course covers all key issues of IL, focusing particularly on the applied aspects of the subject to help learners use it effectively for solving real life problems.
Learning Objectives	<ul style="list-style-type: none"> • To help students achieve a set of integrated abilities encompassing the reflective discovery of information. • To assist students to understand how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning. • To enrich the students' knowledge and understanding on the effective and responsible use of information in academic and non-academic purposes • To equip students with necessary skills for critically evaluating media content particularly in online environment.

Course Details

Unit	Content	Learning outcomes	Methods & technique, activities	No. of hours (60)	Assessment tools/ procedures
1	Introduction to information literacy (IL) IL: Definition, necessity, objectives and scope; Implications for libraries and librarians, workplace, society and culture.	Identify the nature and significance of IL in the contemporary world.	<ul style="list-style-type: none"> • Lecture • question-answer 	6	<ul style="list-style-type: none"> • Question-answer • Quiz
2	Learning theories and their implications for IL: IL and learning theories; Information literacy and lifelong learning; IL and pedagogy; IL and multiliteracies; IL and livelihood skills; IL assessment.	Received hands-on understanding on the theories of learning. Recognize the 21 st century life-skills and their relationship to IL. Understand the techniques of IL assessment.	<ul style="list-style-type: none"> • Lecture • question-answer 	8	<ul style="list-style-type: none"> • Quiz
3	Models of IL: Seven faces of information literacy; Seven pillars/standards of information literacy; Big6; PLUS, etc.	Conceptualize the major models of IL and their application in real life.	<ul style="list-style-type: none"> • Lecture • Quiz • Assignment 	10	<ul style="list-style-type: none"> • Mid-term examination
4	IL education and guidelines: IL education in Bangladesh and in other countries; IL training and human resource development (HRD); IFLA guidelines; ALA IL competency standards for higher education.	Recognize IL education requirements and other pedagogical issues. Identify IL training and HRD issues.	<ul style="list-style-type: none"> • Lecture • question-answer • Interactive and group discussion 	8	<ul style="list-style-type: none"> • Presentation

5	Information literacy in the digital age: IL tools; Search strategies; Impact of IL in bridging the digital divide; Digital literacy; Web 2.0 and IL.	Assess the respective utilities of tools required for IL. Understand the implications of WEB 2.0 tools for IL.	<ul style="list-style-type: none"> Lecture Question-answer Assignment 	6	<ul style="list-style-type: none"> Quiz
6	Media and information literacy (MIL): Definition, nature; scope and dimensions; Representation in media and information; GAPMIL; Traditional and emerging media; Assessing MIL.	Recognize fundamental issues related to MIL. Identify current and future trends of MIL.	<ul style="list-style-type: none"> Lecture Question-answer Presentation 	8	<ul style="list-style-type: none"> Question-answer Quiz
7	Ethics in IL: Information ethics in the context of IL; Academic integrity and IL; Plagiarism and the role of IL practitioners; Challenges of maintaining ethics in IL.	Conceptualize ethical issues related to IL. Demonstrate skills for applying ethical practices of IL.	<ul style="list-style-type: none"> Lecture Question-answer Debate 	6	<ul style="list-style-type: none"> Presentation
8	Practical works in IL: Practical works on measuring IL competency; Tutorial; Project assignment, etc.	Demonstrate IL skills in solving real life problems.	<ul style="list-style-type: none"> Lecture Interactive and group discussion Question-answer Quiz Presentation 	8	<ul style="list-style-type: none"> Mid-term examination

Summative assessment: Theoretical courses

Assessment type	Assessment method(s)	Proportion of marks
Mid-term exams	Two mid-term examinations will be held during the course of studies	30%
Class attendance & participation	Students' attendance as well as their participation in class activities will be recorded and marks will be given accordingly	10%
Semester assessment	Final examinations consisting of both broad and short questions will be conducted at the end of the course	60%

Reading List:

- Blanchet, H., Powis, C. & Webb, J. (2011). *A guide to teaching information literacy: 101 practical tips* (1st ed.). UK: Facet Publishing.
- Cox, C.N. & Lindsay, E.B. (2008). *Information Literacy Instruction Handbook*. USA: American Library Association.
- Godwin, P. (2008). *Information Literacy Meets Library 2.0*. UK: Facet Publishing.
- Grassian, E.S. (2009). *Information Literacy Instruction: Theory and Practice*. Neal-Schuman Publishers.
- Radcliff, C.J. (2007). *A practical guide to information literacy assessment for academic librarians*. UK: Libraries Unlimited.
- Ragains, P. (2013). *Information Literacy Instruction That Works, Second Edition: A Guide to Teaching by Discipline and Student Population*. Neal-Schuman Publishers.

MISLM 504 Internet Studies and Web Design [100]

Course Title	Internet Studies and Web Design
Course No.	MISLM 504
Credit Hours	4 Credit, 60 Hours
Brief Description of the Course	This course provides a solid foundation in the fundamental concepts of Internet and web design, and discusses critical issues surrounding their use and how they impact everyday life. An understanding of the concepts and principles underlying the design and use of HTML, ASP, PHP, MySQL, as an integral part of any web site development.
Learning Objectives	<ul style="list-style-type: none"> • To provide knowledge of internet studies and web design at the theoretical and pragmatic level. • To develop an insight into relevant technology-raised issues and explain how internet could be safe and appropriate for using in libraries. • To demonstrate how to develop a website and give assignment on a small project to apply their acquired knowledge and skills of internet and websites.

Course Details

Unit	Content	Learning outcomes	Methods & technique, activities	No. of hours (60)	Assessment tools/ procedures
1	Introduction to WWW and Internet technologies: Basic concepts, evolution, technologies and infrastructure of World Wide Web and Internet; TCP/IP and other internet protocols; Internet Service Provider (ISP), connectivity and bandwidth; switching techniques, Major tools and services.	Able to identify basic concepts of WWW, TCP/IP and other internet protocols	<ul style="list-style-type: none"> • Class lectures, • Concept mapping 	8	<ul style="list-style-type: none"> • Short questions
2	Internet application in Library and information activities: Application of Internet tools and services in library and information centers; orientation with different types of web information sources and their use; Search engines and navigation techniques for searching and retrieval of information on the web; Introduction web-based library system/virtual library systems.	Able to recognize application areas of internet in library and information services	<ul style="list-style-type: none"> • Class lectures, • Problem-Solving Exercises 	7	<ul style="list-style-type: none"> • Quizzes
3	Creating website: Elements of static and dynamic web site; principles, art and planning of web site, content structuring and technologies; developing database driven web site for libraries and information centers; Addressing and publishing web products and sites; advertising and promotion of web product, assessment and evaluation techniques of web products and sites.	Able to know how to create web sites and solve the web related problems.	<ul style="list-style-type: none"> • Class lecture • Demonstration with practical application • Educational visit to some web development companies 	7	<ul style="list-style-type: none"> • Class test
4	Practical Laboratory works: Browser basics: main elements, distinct environments, downloading and exploring feature of different browsers e.g. Firefox, Opera, IE etc.; E-mail Basics; creating static and dynamic web products and sites using mark up language e.g. HTML/XHTML, xml, Cascade Style Sheet (CSS), scripting with PHP/ Java Script/ VB script, data driven web applications etc.	Able to develop web site using HTML	<ul style="list-style-type: none"> • Demonstration with practical applications 	8	<ul style="list-style-type: none"> • Quiz test

Unit	Content	Learning outcomes	Methods & technique, activities	No. of hours (60)	Assessment tools/ procedures
5	E-learning using the web: Concepts of e-learning, e-learning in LIS education, Web 2.0 and library 2.0, Electronic content management/ Web content management, cloud computing and information modeling in the internet, information architecture in the web	Conceptualize e-learning, cloud computing and information architecture	<ul style="list-style-type: none"> • Class lectures • Concept mapping 	7	<ul style="list-style-type: none"> • Surprise test
6	Web directory and Search engine: Conceptual issues of web directory, features of web directory, Search Engine: how they work, functions, features, difference between web directory and search engine, anatomy of Google, Google earth.	Able to recognize web directory and search engines	<ul style="list-style-type: none"> • Class lectures • Problem-solving exercises 	8	<ul style="list-style-type: none"> • Presentation
7	Internet tools and techniques and Cyber crimes: Email, News/Usenet, Telnet, FTP, WWW, Gopher, Archie, IRC, Instant messaging, Wiki, Blog, YouTube, Groups, mailing list, Talk facilities, Internet phone, Video conferencing, Junk mail, online frauds, identity theft, password cracking, hacking, Malware etc.	Able to acquire fundamentals knowledge of internet tools, techniques and cyber crimes	<ul style="list-style-type: none"> • Class lectures • Problem-solving exercises 	8	<ul style="list-style-type: none"> • Class test
8	Practical project using HTML, XML and CSS	Able to apply web programming language to develop a website	<ul style="list-style-type: none"> • Demonstration with practical applications. 	7	<ul style="list-style-type: none"> • Competency-based test

Summative Assessment: Theoretical and Practical Courses

Assessment type	Assessment details	Proportion
Mid-term Exams	Two Mid-term Theory Examinations on (10+10) =20 Marks and two mid-terms practical exams. on (05+05) =10 marks	30%
Class Attendance/Participation	Class attendance on 5 marks and class performance on 05 marks=10 marks	10%
Semester Assessment Theory	Semester final exam. On theory will be taken on 40 marks.	40%
Semester Assessment Practical	Practical exams will be taken on 20 marks in the computer lab	20%

Reading List:

- Burns, J. (1999). *HTML goodies*. UK: Macmillan.
- Crumlish, C. (1999). *The internet: no experience required*. New Delhi: BPB.
- Daividsen, S. (2004). *Web site design with the patron in mind: a step-by-step guide for libraries*. Chicago: American Library Association.
- Hann, H. & Stout, R.. (1998). *Internet: the complete reference*. New York, NY: McGraw-Hill.
- Kitchin, R. (1998). *Cyberspace: the world in the wires*. New York, NY: Wiley.
- Kumar, G.R. (2006). *Cyber crimes*. New Delhi: Viva Books.
- Lehnert, W.G. (1999). *Internet 101: a beginner's guide to the Internet and the World Wide Web*. Massachusetts: Addison-Wesley.
- Yank, K. (2009). *Build your own database driven web site using PHP & My SQL*. Collingwood: Site point Pty.
- Young, M.L. (1999). *Complete internet reference*. New York, NY: McGraw-Hill.

Viva-Voce [25]

MISLM 505: Advanced Classification- Practical [50]

Course Title	Advanced Classification Practical
Course No.	MISLM 505
Credit Hours	2 Credit, 30 Hours
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 reference to Universal Decimal Classification scheme (UDC). In terms of popularity UDC is the second of the three schemes of library classification LIS students worldwide are required to study. In this course UDC is explained with reference to its structure, notation, auxiliaries, synthetic devices and alphabetical index. Contents also include brief description of its origin and development, discuss its strength and weakness, and provide adequate guidance for number building by the students themselves. At the end the number building in UDC is demonstrated: with the help of a few exercises. The strength and weaknesses of the major schemes are demonstrated with practical applications.
Learning Objectives	This course is designed to introduce students to: <ul style="list-style-type: none"> • The techniques and skills in information processing and organization; • Practical knowledge of organizing library materials; • Techniques of subject coordination in information retrieval, compilation of index, bibliography etc.

Course Details

Unit	Content	Learning outcomes	Methods & techniques, activities	No. of hours (30)	Assessment tools/ procedures
1	Introduction to library classification schemes: Introduction to the major schemes of library classification: their origin and development, organization, theoretical basis and principles	General ideal development on different schemes of library classification.	<ul style="list-style-type: none"> • Lecture • Group discussion 	4	<ul style="list-style-type: none"> • Question & answer • Assignment
2	Number building: UDC Construction of classification numbers with different Auxiliaries of Universal Decimal Classification (UDC) Part I: Auxiliary Tables Section I: Common Auxiliary signs and subdivisions 1a Coordination and Extension 1b Relation. Sub grouping. Order fixing 1c Common auxiliaries of language 1d Common auxiliaries of form 1e Common auxiliaries of place 1f Common auxiliaries of race, ethnic grouping, and nationality 1g Common auxiliaries of time 1h Subject specification by notation from non-UDC sources 1k Common auxiliaries of General characteristics Section II: Special Auxiliary subdivisions	Practical knowledge development on subject analysis and classification of sources of information	<ul style="list-style-type: none"> • Lecture, • Group discussion • Hands on practice. 	12	<ul style="list-style-type: none"> • Question & answer • Assignment • Quiz.

3	Construction of subject heading: Analysis of the titles of documents to form subject heading and assigning representative notation using UDC scheme	Devise the ability toward subject heading construction and keyword identification	<ul style="list-style-type: none"> • Lecture • Group discussion • Hands on practice 	8	<ul style="list-style-type: none"> • Question & answer • Assignment • Quiz
4	Number building: DDC Construction of classification numbers with different Auxiliaries of Dewey Decimal Classification (DDC)	Knowing the techniques of number building and arranging library materials	<ul style="list-style-type: none"> • Lecture • Group discussion • Hands on practice 	6	<ul style="list-style-type: none"> • Question & answer • Assignment • Quiz

Summative Assessment: Practical Courses

Assessment Type	Assessment method(s)	Proportion of Marks
Mid-term Exams	One mid-term exam will be taken on 15 marks Problem solving by subject analysis and number building of given document and assignments.	15%
Class Attendance & Participation	Quiz, presentation, question and answer	05%
Semester Final	Semester final examination	30%

Reading List:

British Standards Institution (2005) *Universal Decimal Classification*, London: BSI

Kumar, K. (1979) *Theory of classification*. Vikas: India

Mitchell, J. S (2011) *Dewey Decimal Classification Scheme* (2rd edition) New York: Forest press.

MISLM 506: Advanced Cataloguing- Practical [50]

Course Title	Advanced Cataloguing Practical
Course No.	MISLM 506
Credit Hours	2 Credits, 30 Hours
Brief Description of the Course	The course provides detailed practical outlines of cataloguing non-book items, preparation of shelf list entry, entry for the multivolume works, and works of corporate authors.
Learning Objectives	At the end of this course, students will be able to catalogue of <ul style="list-style-type: none"> • Non-book materials in traditional and online formats; • Prepare catalogue entry for the works of corporate author; • Prepare shelf list entry for books and non-book materials; • Prepare catalogue entry for cartographic items; • Make entry heading for Oriental Muslim, Hindu, Buddhist names.

Course Details

Unit	Content	Learning outcomes	Methods & techniques, activities	No. of hours (30)	Assessment tools/ procedures
1	Entry heading of Oriental Names: Muslim names, Hindu names, Buddhist names;	Know, how to prepare entry heading of Muslim, Hindu and Buddhist names;	<ul style="list-style-type: none"> • Lecture • Hands on practice 	4	<ul style="list-style-type: none"> • Question & answer • Assignment
2	Preparation of Main entry (Shelf list): Preparation of shelf list entry with tracing;	Know, how to prepare shelf list catalogue entry.	<ul style="list-style-type: none"> • Lecture • Discussion • Hands on practice 	4	<ul style="list-style-type: none"> • Question & answer • Assignment
3	Preparation of Main entry (Corporate author): International organization, Government departments, National conference, Government publications;	Know, how to prepare catalogue entry of corporate bodies.	<ul style="list-style-type: none"> • Group discussion • Hands on practice 	4	<ul style="list-style-type: none"> • Assignment, • Quiz
4	Preparation of Main entry: Preparation of entry of multi-volume works;	Know, how to prepare catalogue entries for multi-volume works.	<ul style="list-style-type: none"> • Lecture • Hands on practice 	4	<ul style="list-style-type: none"> • Assignment, • Quiz • Question & Answer
5	Cataloguing non-book materials: Preparation of entries for Map, Atlas, Globe; Motion picture/film, Filmstrip	Know, how to prepare catalogue entries for non-book materials.	<ul style="list-style-type: none"> • Hands on practice 	4	<ul style="list-style-type: none"> • Assignment • Quiz • Question & answer
6	Preparation of entry in MARC format using Koha;	Know, how to use MARK format for preparing above types of catalogue entries.	<ul style="list-style-type: none"> • Lab 	10	<ul style="list-style-type: none"> • Assignment, • Quiz • Question & answer

Summative Assessment: Practical Courses

Assessment Type	Assessment details	Proportion of Marks
Mid-term Exams	One mid-term exam will be taken on 15 marks	15%

Class Attendance / Participation	Class Attendance and class performance or participation 5 marks	05%
Semester Exam	Semester final examination will be taken on 30 marks	30%

Reading List

Maxwell, M. F. (2004) *Handbook for AACR2 explaining and illustrating Anglo-American cataloguing rules through the 2003 updates*. Chicago: ALA
Library of Congress (2019) *MARC 21 Format for Bibliographic Data*, New York: LC.

MISLM 507: Knowledge Management [100]

Course Title	Knowledge Management
Course No.	MISLM 507
Credit Hours	4 Credit, 60 Hours
Brief Description of the Course	With the growing recognition of knowledge as a critical asset for organizational development as well as with massive advancements in ICTs, Knowledge Management (KM) has earned increasing recognition in various sectors. In view of this, this course provides the students of information science and library management with a well-rounded understanding of KM including KM models, systems, strategies, technologies as well as critical issues related to organizational learning.
Learning Objectives	<ul style="list-style-type: none"> • To help students understand the theoretical foundation of knowledge management and build capabilities to manage knowledge within and across organizational boundaries. • To equip students with necessary skills and expertise for managing knowledge in the 21st century's competitive workplace. • To provide students with practical knowledge to transform libraries and information centers as KM platforms. • To infuse practical capabilities among students for developing and maintaining knowledge repositories. • To help students achieve comprehensive understanding on organizational culture and organizational learning.

Course Details

Unit	Content	Learning outcomes	Methods & techniques, activities	No. of hours (60)	Assessment tools/ Procedures
1	Fundamentals of knowledge management (KM): DIKW continuum; basics of information and knowledge management; History and evaluation of KM; Generations and Principles of KM; Intellectual capital.	Conceptualize the key terms and issues related to KM; Recognize the significance and dimensions of intellectual capital.	<ul style="list-style-type: none"> • Lecture • Question & answer 	7	<ul style="list-style-type: none"> • Question & answer • Quiz
2	KM Frameworks and Models: Understanding KM frameworks; Major theoretical models of KM; KM spectrum and its implications.	Analyze the functioning of KM models; Conceptualize the KM spectrum.	<ul style="list-style-type: none"> • Lecture • Question & answer 	8	<ul style="list-style-type: none"> • Quiz
3	Core activities of KM: Knowledge capture and codification; Knowledge sharing and application; Strategic and practical implications of knowledge application; Communities of Practice (CoP).	Comprehend the core KM activities and their application; Conceptualize CoPs and their application in KM.	<ul style="list-style-type: none"> • Lecture • Assignment 	9	<ul style="list-style-type: none"> • Assignment

Unit	Content	Learning outcomes	Methods & techniques, activities	No. of hours (60)	Assessment tools/ Procedures
4	KM Tools and Technologies: Tools for creating, sharing and applying knowledge; Role of technology in Knowledge Management; KM infrastructure.	Demonstrate practical understanding of major KM tools and technologies.	<ul style="list-style-type: none"> • Lecture • Question-Answer • Presentation 	9	<ul style="list-style-type: none"> • Question & answer • Quiz
5	Organizational Culture and Organizational Learning: Organizational Culture and its implications for KM; Organizational Maturity Models; Organizational learning and KM.	Recognize the process of organizational culture building and its implications for KM; Analyze the nature and scope of organizational learning.	<ul style="list-style-type: none"> • Lecture • Question & answer • Interactive and Group discussion 	6	<ul style="list-style-type: none"> • Question & answer • Quiz
6	KM Implementation and Measurement: Approaches to implementing knowledge management; Critical success factors; KM performance measurement and evaluation.	Conceptualize strategies for implementing KM; Understand the techniques for measuring the value of KM initiatives.	<ul style="list-style-type: none"> • Lecture • Question & answer • Presentation 	7	<ul style="list-style-type: none"> • Question & answer • Presentation
7	Libraries and KM: Libraries and information centers as KM hubs; Roles and responsibilities of LIS professionals in KM; Interrelationships between libraries and various institutions regarding KM.	Identify and analyze the role of libraries and LIS professionals in KM.	<ul style="list-style-type: none"> • Lecture • Question & answer • Quiz 	8	<ul style="list-style-type: none"> • Question & answer • Quiz
8	Current Trends and Future Challenges of KM: National and global trends in KM education, research and professional practices; Emerging trends in KM; Future challenges for KM.	Identify the key trends and challenges of KM.	<ul style="list-style-type: none"> • Lecture • Interactive and Group discussion 	6	<ul style="list-style-type: none"> • Mid-term examination

Summative Assessment: Theoretical Courses

Assessment Type	Assessment method(s)	Proportion of Marks
Mid-term Exams	Two mid-term examinations will be held during the course of studies	30%
Class Attendance & Participation	Students' attendance as well as their participation in class activities will be recorded and marks will be given accordingly	10%
Semester Assessment	Final examinations consisting of both broad and short questions will be conducted at the end of the course	60%

Reading List

Dalkir, K. (2013). *Knowledge management in theory and practice*. Routledge.

Eardley, A. (Ed.). (2010). *Innovative Knowledge Management: Concepts for Organizational Creativity and Collaborative Design: Concepts for Organizational Creativity and Collaborative Design*. IGI Global.

Hislop, D., Bosua, R., & Helms, R. (2018). *Knowledge management in organizations: A critical introduction*. Oxford University Press.

Lytras, M. D. (Ed.). (2008). *Knowledge Management Strategies: A Handbook of Applied Technologies: A Handbook of Applied Technologies*, IGI Global.

Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. Oxford university press.

O'Dell, C. S., O'dell, C., Grayson, C. J., & Essaiades, N. (1998). *If only we knew what we know: The transfer of internal knowledge and best practice*. Simon and Schuster.

O'Dell, C., O'Dell, C. S., & Hubert, C. (2011). *The new edge in knowledge: How knowledge management is changing the way we do business*. John Wiley & Sons.

Ortenblad, A. (2014). *Handbook of Research on Knowledge Management : Adaptation and Context (Edited)* Edward Elgar Publishing.

Sanchez, R., & Heene, A. (Eds.). (1997). *Strategic learning and knowledge management*, Chichester: Wiley.

Stewart, T. A. (2007). *The wealth of knowledge: Intellectual capital and the twenty-first century organization*. Crown Business.

Wenger, E., McDermott, R. A., & Snyder, W. (2002). *Cultivating communities of practice: A guide to managing knowledge*. Harvard Business Press.

হক, কাজী মোস্তাক গাউসুল (২০১৭) জ্ঞান ব্যবস্থাপনা ঢাকা: মুক্তভাস ।

MISLM 508: Development and Customization of Library Management Software [100]

Course Title	Development and Customization of Library Management Software
Course No.	MISLM-508
Credit Hours	4 Credit, 60 Hours
Brief Description of the Course	Today, the information professionals have to work with different types of software both for in-house preparation and services. Not only that, they need to customize these software packages according to their local needs. Basically it is a course titled “Software Engineering” of CSE. It has been adopted in ISLM as allied subject with the objective to assist the student in understanding the basic theory of software engineering, and to apply these basic theoretical principles to library software development and customization.
Learning Objectives	At the end of the semester, students will be able to- <ul style="list-style-type: none"> • analytically apply general principles of software development; • demonstrate the necessary understanding of methods and techniques for software management, and also to be able to use these in various applications in libraries; • master general principles and techniques for dealing with quality attributes for various types of software systems. • understand, plan and carry out independent work within various library application domains; • have an orientation with programming language like C and others. • work as domain expert in different applications of library and information systems.

Course Details

Unit	Content	Learning outcomes	Methods & techniques, activities	No. of hours (60)	Assessment tools/ procedures
1	Introduction to software and software engineering: Introduction to Software, software characteristics, categories and applications; Software engineering: process, methods and tools, the tasks of software development	Describe the nature of software engineering (SE) and software development environment; Recognize the applications of SE in LIS.	<ul style="list-style-type: none"> • Class lectures • Presentation 	4	<ul style="list-style-type: none"> • Assignment
2	Software process models: Software development life cycle (SDLC) models and processes: the waterfall model, the spiral model, prototyping, RAD, incremental development, V shaped, the unified process etc.; Open source software development; architecture of library management software.	Interpret the phase activities in software design; Compare different software development models	<ul style="list-style-type: none"> • Class lectures • Presentations 	6	<ul style="list-style-type: none"> • Quiz
3	Structured analysis and design: Introduction to structured analysis and design, tools and process	Express the traditional approach of SDLC; Apply the tools and techniques of structured analysis	<ul style="list-style-type: none"> • Class Lecture • Presentation • Group Discussion 	6	<ul style="list-style-type: none"> • Question & answer
4	Object oriented analysis and design (OOAD): Introduction to OOAD, tools and process; requirement analysis, Software Requirement Specification (SRS) using UML (Unified Modeling Language), Use cases	Illustrate the domain of OOAD; Distinguish between traditional and non-traditional approaches to SDLC; Estimate the modular activities of OOAD process	<ul style="list-style-type: none"> • Class Lecture • Presentation • Group Discussion • Lab works 	8	<ul style="list-style-type: none"> • Mid-term • Short questions • Assignment

Unit	Content	Learning outcomes	Methods techniques, activities &	No. of hours (60)	Assessment tools/ procedures
5	Computer programming: Programming tools and techniques; Algorithm, pseudo code, control structure etc.	Recognize the environment of computer programming; Identify the activities in algorithm and pseudo coding.	<ul style="list-style-type: none"> • Class lectures • Lab work 	4	<ul style="list-style-type: none"> • Mid-term • Lab test
6	Software testing, quality assurance and maintenance: Software testing levels, tools and process; standard, evaluation and selection of open source and commercial software for library applications, software maintenance.	Express the standard and activities of software testing, evaluation and maintenance; Distinguish between open source and commercial software; Justify the need and extent of software customization. Plan for library software customization	<ul style="list-style-type: none"> • Class lectures • Presentation 	6	<ul style="list-style-type: none"> • Mid-term
7	Software project management: Project management concept, process, knowledge areas and tools; library software project management.	Apply the tools and techniques of PM in library software project; Prepare SRS, project proposal and manage library software project.	<ul style="list-style-type: none"> • Class lectures • Presentations 	6	<ul style="list-style-type: none"> • Mid-term
8	Laboratory works: Programming with C, C++, Python or the like; Installation and customization of library management software.	Writing computer programs; Customize, justify and update library software	<ul style="list-style-type: none"> • Demonstration with practical applications. 	20	<ul style="list-style-type: none"> • Mid-term • Lab final test project paper

Assessment:

Assessment type	Assessment details	Proportion of Marks
Mid-term Exams	Two Mid-term Theory Examinations on (10+10) =20 Marks and two mid-terms practical exams. on (05+05) =10 marks	30%
Class Attendance/Participation	Class attendance on 5 marks and class performance on 05 marks=10 marks	10%
Semester Assessment Theory	Semester final exam. On theory will be taken on 40 marks.	40%
Semester Assessment Practical	Practical exams will be taken on 20 marks in the computer lab	20%

Reading List

- Bronson Gray J. and Silver, Howard (2013) *An Introduction to Programming with ANSI C*. New York : West Publishing.
- Deitel, H. M., & Deitel, P. J. (2006). *C++ how to program*. Prentice Hall.
- Easttom, C. (2003). *C++ Programming Fundamentals*. Charles River Media.
- Kapur, R. (2010) *Getting Started With Open Source Software: How to Run a Successful Free Software Project*. Markham, ON: IBM
- Laplante, P. A. (2007). *What every engineer should know about software engineering*. CRC Press.
- Pressman, R. S. (2005). *Software engineering: a practitioner's approach*. Palgrave Macmillan.
- Sulayman K. Sowe, Ioannis G. Stamelos and Ioannis M. Samoladas (2008) *Emerging Free and Open Source Software*. Practices Hershey : IGL Publishing.

MISLM 509: Library Systems and Services [100]

Course Title	Library Systems and Services
Course No.	MISLM 509
Credit Hours	4 Credit, 60 Hours
Brief Description of the Course	Library systems and services offer a wide range of discussion on public, academic, national and special libraries. This course is designed to systematic study of these libraries both nationally and internationally. It explores different libraries by looking at the history, objectives, functions, purposes and needs in the society.
Learning Objectives	<ul style="list-style-type: none"> • To know how the public, national, academic and special library systems work. • Explore the existing status of major library systems and services both nationally and internationally. • To know how library operate its major activities e.g., acquisition, processing and circulation. • To the service innovation activities in libraries.

Course Details

Unit	Content	Learning outcomes	Methods & techniques, activities	No. of hours (60)	Assessment tools/ Procedures
1	The public library system and service: Origin, development, movement, mission and vision of the public library, IFLA/UNESCO public library manifesto, IFLA Public Library Service Guidelines, public libraries abroad e.g., USA, Canada, Australia, Public library services e.g., social media-based services, community Partnerships/Outreach services and mobile library, public libraries in Bangladesh, Designing innovative services for public libraries in Bangladesh.	Demonstrate the impact of public library (PL); Analyze the nature of PL abroad; Recognize the importance of PL in society.	<ul style="list-style-type: none"> • Lecture • Presentation • Open discussion • Question & answer 	10	<ul style="list-style-type: none"> • Midterm exams • Class attendance • Quiz
2	Academic library system and service : History, development, objectives and functions of academic libraries; management principles and practices employed in academic libraries, current trends of academic library services, effectiveness of academic library programs, the academic library as an educational system, library consortium.	Measure the importance of AL teaching and learning; Recognize the significance of AL in digital scholarship	<ul style="list-style-type: none"> • Question & answer • Quiz 	10	<ul style="list-style-type: none"> • Midterm exams • Class attendance • Quiz
3	School library system and service: History, origin, purpose of school library, designing school library services e.g., book lending, kindles, collection, services, space allocation and others, learning commons, School library standards for learners, school libraries in reading and learning habits, early literacy and school library, school libraries in developed world, school library associations, school libraries in Bangladesh.	Recognize the importance of school library in reading habit; Analyze the nature and scope of School library	<ul style="list-style-type: none"> • Lecture • Presentation • Discussion 	8	<ul style="list-style-type: none"> • Midterm exams • Class attendance • Performance • Quiz
4	Special library system and service: Pattern of special libraries e.g., corporate, law, technical, research, medical and others, objectives and functions of the special library; ICT in special libraries, growth and development of special libraries in Bangladesh; role of special libraries in research, special library associations.	Identify and analyze the role of special libraries in scientific organizations;	<ul style="list-style-type: none"> • Group discussion • Presentation 	10	<ul style="list-style-type: none"> • Question & Answer, Quiz

Unit	Content	Learning outcomes	Methods & techniques, activities	No. of hours (60)	Assessment tools/ Procedures
5	National library system and service : Definition, purpose, scope, objectives and functions of national library; national libraries in the developed and developing countries; national library co-operation; legal deposit; national library services Bibliographic services and control; extension services; public relations and publicity.	Conceptualize the cultural heritage and role of national libraries; Measure the impact of national libraries for nation building	<ul style="list-style-type: none"> • Lecture • Assignment 	5	<ul style="list-style-type: none"> • Assignment
6	Library operations and management : Acquisition policy of different libraries, Patron driven acquisition, selection and acquisition of reading materials e.g., books and periodicals, ordering, collection management, processing of library resources, circulation of library materials, design and development of a particular module of a specific library, design an operation manual on borrowing, interlibrary loan, distance learners and so on	Demonstrate the practical operations of library management	<ul style="list-style-type: none"> • Lecture • Assignment 	6	<ul style="list-style-type: none"> • Question & Answer • Quiz
7	Library System and Services (Asia, USA, Europe and Scandinavian countries): Understanding the library system and service pattern; How is technology improving library services and patron experience and Digital scholarship in developing countries.	Demonstrate the overview of library system and services; Recognize the importance of standard library system.	<ul style="list-style-type: none"> • Assignment • Group discussion 	6	<ul style="list-style-type: none"> • Question & Answer • Quiz
8	Service innovation in libraries: Service innovation in libraries; Tools for service innovation; Service innovation model; Types of innovation; Barriers; Factors and actors.	Conceptualize the service innovation model for libraries; Analyze the applicability of model.	<ul style="list-style-type: none"> • Assignment • Group discussion 	5	<ul style="list-style-type: none"> • Question & Answer • Quiz

Summative Assessment: Theoretical Courses

Assessment type	Assessment method(s)	Proportion of Marks
Mid-term Exams	Two mid-term examinations will be held during the course of studies	30%
Class Attendance & Participation	Students' attendance as well as their participation in class activities will be recorded and marks will be given accordingly	10%
Semester Assessment	Final examinations consisting of both broad and short questions will be conducted at the end of the course	60%

Reading List

Beagrie, N. (2003). *National Digital Preservation Initiatives: An Overview of Developments in Australia, the Netherlands, and the United Kingdom and of Related International Activity. Strategies and Tools for the Digital Library*. Council on Library and Information Resources, 1755 Massachusetts Ave., NW, Suite 500, Washington, DC 20036.

Black, A., & Muddiman, D. (2017). *Understanding community librarianship: the public library in post-modern Britain*. London: Routledge.

Keyes, A. M. (1995). The Value of the Special Library: Review and Analysis. *Special libraries*, 86(3), 172-87.

McKool, S. S. (2007). Factors that influence the decision to read: An investigation of fifth grade students' out-of-school reading habits. *Reading improvement*, 44(3), 111-132.

Murison, W. J. (1988). *The public library: its origins, purpose and significance*. London: C. Bingley.

MISLM 505: Advanced Classification Practical [50]
MISLM 506: Advanced Cataloguing Practical [50]
MISLM 507: Knowledge Management [100]
MISLM 508 : Development and Customization of Library Management Software [100]
MISLM 510: Thesis [100]

Viva-Voce [25]

Marks distribution: Dissertation 75 (marking by Examiner), Defence 25 (marking by Exam committee) Defence will be conducted by Academic committee members