

BS-LIS Courses

A student will have to pass eight semesters (i.e., four years) with 43 courses (42 in case of Research Project / Project) comprising 129 credit hours and 4300 marks to earn a BS (4-year) in LIS Degree. All courses are of 100 marks each except Research Project / Project which comprises 200 marks. The semester-wise breakup of the courses is as under:

Semester-wise Breakup of BS-4 Courses (LIS)

(Note: Sequence may change)

1st Semester (Autumn)

Sr#	Course	Code	CrHrs
1	English-I	9407	3
2	Pakistan Studies	9374	3
3	Basics of Information and Communication Technology	5403	3
4	Introduction to Logic	8413	3
5	Soft Skills (Personality Development)	9201	3

2nd Semester (Spring)

Sr#	Course	Code	CrHrs
1	English-II	9408	3
2	Islamiyat (اسلاميات) OR Ethics (اخلاقيات) (for non-Muslims)	9401 OR 5437	3
3	Language Skills and Communicative Abilities	9266	3
4	Introduction to Psychology	8411	3
5	Introduction to Library and Information Professions	9202	3

3rd Semester (Autumn)

Sr#	Course	Code	CrHrs
1	English-III	9409	3
2	Pre-calculus	4431	3
3	General Science	6404	3
4	Introduction to Sociology, Culture & Society	9410	3
5	Economy of Pakistan	8432	3
6	Information Literacy	9204	3

4th Semester (Spring)

Sr#	Course	Code	CrHrs
1	English-IV	9416	3
2	Introduction to Statistics	4485	3
3	Planning Library Building, Space and Services	9205	3
4	Collection Development and Management	9206	3
5	Classification and Subject Headings	9208	3
6	Cataloguing and RDA	9209	3

5th Semester (Autumn)

Sr#	Course	Code	CrHrs
1	Information Architecture	9203	3
2	Information Science in Transition	9207	3
3	Integrated Library Automation Systems	9210	3
4	Library Public Services	9211	3
5	Library and Web Technology	9212	3
6	Library and Database Technology	9213	3

6th Semester (Spring)

Sr#	Course	Code	CrHrs
1	Modern Information Retrieval Systems	9214	3
2	Communication Skills for Information Professionals	9215	3
3	Developing Digital Library	9216	3
4	Emerging Trends in Library and Information Services	9217	3
5	Management Basics for Information Professionals	9218	3
6	Library Analytics and Big Data	9219	3

7th Semester (Autumn)

Sr#	Course	Code	CrHrs
1	Library Security and Safety	9220	3
2	Marketing of Library and Information Services	9221	3
3	Archives, Records, and Information Management	9222	3
4	Knowledge Management	9223	3
5	Auditing Information Systems	9224	3
6	Development of Library and Information Professionals	9225	3

8th Semester (Spring)

Sr#	Course	Code	CrHrs
1	Research Methodology in Library and Information Sciences	9226	3
2	Evaluation of Library and Information Services	9228	3
3	Project Management in Libraries, Archives and Museums	9229	3
OR IN LIEU OF 9228 and 9229			
	Research Project / Project	9227	6

COURSE OUTLINES

SEMESTER ONE

1. English-I (Communication Skills)

Course Code: 9407

Unit#	Title
1	A: Function (Asking and Answering Questions) B: Structure (The Simple Present Tense; The Present Continuous Tense) C: Reading (Guessing the Meaning of Words) D: Writing (Writing Connected Sentences) E: Listening (Understanding Directions)
2	A: Function (Seeking confirmation) B: Structure (Present Perfect Tense) C: Reading (Synonyms and Antonyms) D: Writing (Informal or Personal Letters) E: Listening (Listening to a Lecture and Taking Notes)
3	A: Function (Agreeing and Disagreeing) B: Structure (Simple Past Tense) C: Reading (Predicting the Contents of a Book) D: Writing (Letter of Apology) E: Listening (Listening to News)
4	A: Function (Expressing Possibilities and Impossibilities) B: Structure (Modal Verbs) C: Reading (Skimming and Scanning) D: Writing (Letters Giving Advice) E: Listening (Giving Advice)
5	A: Function (Expressing Certainly and Uncertainly Expressing Obligation) B: Structure (Active and Passive Voice) C: Reading (Reading Different Kinds of Texts) D: Writing (Writing Job Application Letter) E: Listening (Listening to a Job Interview)
6	A: Function (Expressing Preference and Intention) B: Structure (Future Tense: Will Going) C: Reading (The Main Idea/Topic Sentence/Supporting Details) D: Writing (Paragraph Development) E: Listening (Listening to Announcements)
7	A: Function (Asking Giving and Refusing Permission) B: Structure (Can and Could/May and Might) C: Reading (General Reading Exercise) D: Writing (Writing an Essay) E: Listening (Listening to a Speech)
8	A: Function (Expressing Appreciation and Gratitude) B: Structure (Indirect or Reported Speech)

	C: Reading (Making Inferences) D: Writing (Writing a Descriptive Essay) E: Listening (Listening to Descriptions)
9	A: Function (Giving Advice and Suggestions) B: Structure (Personal Pronouns) C: Reading (Facts and Opinions) D: Writing (Writing a Narrative Essay) E: Listening (Listening to a Story)

<https://aiou.edu.pk/SoftBooks/9407.pdf>

2. Pakistan Studies

Course Code: 9374

Unit#	Title
1	Ideology of Pakistan Origin and Background
2	Sufis and Ulemas in Sub Continent
3	Educational Movements in Sub-Continent
4	British Rules and Separate Muslim Identity-I
5	British Rule and Separate Muslim Identity-II
6	Constitutional and Political Development in Pakistan-I
7	Constitutional and Political Development in Pakistan-II
8	Natural Resources and Economic Development
9	Foreign Policy of Pakistan

<https://aiou.edu.pk/SoftBooks/9374.pdf>

3. Basics of ICT

Course Code: 5403

Unit#	Title
1	Introduction to ICT
2	Overview and Organization of Computers
3	Input Devices
4	Output Devices
5	Computer Software
6	Operating System
7	Data Communication and Networking
8	Multimedia
9	Introduction to Computer Languages

<https://aiou.edu.pk/SoftBooks/5403.pdf>

4. Introduction to Logic

Course Code: 8413

Unit#	Title
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1	Basic Concepts
2	Informal Fallacies
3	Categorical Propositions
4	Propositional Logic
5	Natural Deduction in Propositional Logic.
6	Predicate Logic
7	Inductive Logic
8	Probability and Statistical Reasoning
9	Hypothetical/Scientific Reasoning

Hurley, P. J. (2010). *A concise introduction to logic* (11th ed.). Australia: Wadsworth.
<https://epdf.pub/queue/a-concise-introduction-to-logic-eleventh-edition.html>

5. Soft Skills (Personality Development)

Course Code: 9201

Unit#	Title
1	Soft skills and personality development
2	Communication skills
3	Interpersonal relationships
4	Team building and leadership
5	Time management and managing stress
6	Thinking and presentation skills
7	Problem solving
8	Decision making
9	Employment communication and workplace etiquette

Recommended reading:

Joshi, M. (2017). *Soft skills*. <http://worldwideuniversity.org/library/bookboon/soft-skills.pdf>

SEMESTER TWO

1. English-II (Academic Reading and Writing)

Course Code: 9408

Unit#	Title
1	Academic Writing
2	Sequence
3	Classification
4	Cause and Effect
5	Comparison and Contrast
6	Academic Reading
7	Implied Meaning Making Inferences
8	Denotation and Connotation
9	Reading Newspapers

<https://aiou.edu.pk/SoftBooks/9408.pdf>

2. اسلامیات (Islamiyat)

Course Code: 9401

یونٹ	ٹائٹل
1	کتاب و سنت I-
2	کتاب و سنت II-
3	دین اسلام I-
4	دین اسلام II-
5	دین اسلام III-
6	اسوہ حسنہ
7	اسلامی اخلاقی اقدار
8	تہذیب انسانی کی تعمیر میں اسلام کا حصہ
9	ہمارا مستقبل

<https://aiou.edu.pk/SoftBooks/9401.pdf>

OR (in lieu of Course Code 9401)

اخلاقیات (Ethics) (for Non-Muslims only)

Course Code: 5437

یونٹ نمبر	ٹائٹل
1	اخلاقیات کیا ہے، اخلاقیات کا موضوع، اخلاقیات کے مقاصد،
2	اخلاقیات کی تقسیم
3	اخلاقیات اور دوسرے علوم
4	اخلاقیات کا معیار
5	اقدار

6	معاشرہ اخلاقی زندگی کے پس منظر کی حیثیت سے، معاشرتی زندگی اور اس کی اہمیت، معاشرتی عمل اور معاشرتی تفاعل
7	فرد اور معاشرہ
8	معاشرتی زندگی کا ارتقا
9	معاشرہ اور ریاست

<https://aiou.edu.pk/SoftBooks/5437.pdf>

3. Language Skills and Communicative Abilities

Course Code: 9266

Unit#	Title
1	Language as Communication
2	Fundamentals of Grammar
3	Fundamentals of Grammar
4	Listening, Speaking and Writing Skills
5	Listening, Speaking and Writing Skills
6	Journalistic Writing
7	Journalistic Writing
8	Fundamentals of Grammar
9	High Frequency News Stories

<https://aiou.edu.pk/SoftBooks/0964.pdf>

4. Introduction to Psychology

Course Code: 8411

Unit#	Title
1	Introduction
2	Developmental Psychology
3	Personalities and Therapies
4	Psychological Testing & Statistics
5	Motivation & Emotion
6	Sensation & Perception
7	Consciousness & Learning
8	Retention & Forgetting
9	Social Psychology & Abnormal Personality Patterns

Wittig, A.F. (2001). Theory and problems of introduction to psychology (2nd ed.). New York: McGraw-Hill. <https://epdf.pub/queue/schaums-outline-of-introduction-to-psychology-2nd-edition.html>

5. Introduction to Library and Information Professions

Course Code: 9202

Unit#	Title
1	Introduction and creation, diffusion, and utilization of knowledge
2	The role of professionals as change agents
3	The science supporting the information professions
4	Information transfer in the information professions
5	The cycle of professional service
6	The information infrastructure
7	The processes and functions of information professionals
8	The infrastructure of the information professions
9	Trends and issues

Recommended reading: Greer, R. C., Grover, R. J., & Fowler, S. G. (2007). Introduction to the Library and Information Professions. Westport: Libraries Unlimited.

https://paramed.bpums.ac.ir/UploadedFiles/CourseFiles/Introduction_to_the_Library_and_Information_Professions_78f95ccb.pdf

SEMESTER THREE

1. English-III (Basics of Technical English)

Course Code: 9409

Unit#	Title
1	Definition of Technical Writing
2	Technical Writing Applications
3	Proposals
4	Job Application Materials
5	Technical Writing Style
6	Brief Handbook for Technical Writers
7	Using Visual Aids
8	Technical Writing Process
9	Documenting Technical Research Writing

<https://aiou.edu.pk/SoftBooks/9409.pdf>

2. Pre-Calculus

Course Code: 4431

Unit#	Title
1	Real Number System
2	Sets
3	Functions
4	Limits
5	Continuity
6	Sequences and Series
7	Trigonometric Functions and their Applications
8	Differentiation
9	Integration

<https://aiou.edu.pk/SoftBooks/4431.doc>

3. General Science

Course Code: 6404

Unit#	Title
1	Introduction to Science
2	The Earth
3	Matter
4	Mechanics
5	Heat, Light and Sound
6	Electricity and Magnetism
7	The Living World

8	Human System
9	Man and his Environment

<https://aiou.edu.pk/SoftBooks/6404.pdf>

4. Introduction to Sociology, Culture and Society

Course Code: 9410

Unit#	Title
1	Sociology and its Importance
2	Culture
3	Society
4	Social Interaction
5	Social Group and Organization
6	Socialization
7	Conformity and Deviance
8	Social Stratification
9	Dimensions of Inequality

<https://aiou.edu.pk/SoftBooks/9410.rar>

5. Economy of Pakistan

Course Code: 8432

Unit#	Title
1	Assessing Pakistan's Development
2	Agriculture Developments
3	Industrialization Process
4	Balance of Payments & Trade Regimes
5	Monetary Policy, Savings & Inflation
6	Fiscal Policy
7	Macroeconomic Development
8	Poverty: Trend, Causes And Solution
9	Political Economics

Helping Book-I: <https://aiou.edu.pk/SoftBooks/4655.pdf>

Helping Book-II: <https://aiou.edu.pk/SoftBooks/4656.pdf>

6. Information Literacy

Course Code: 9204

Unit#	Title
1	The importance of standards and assessment
2	Integrating the ACRL standards
3	Developing a topic and identifying sources of information
4	Accessing information effectively and efficiently

5	Evaluating information
6	Using information effectively
7	Information, social context, and ethical and legal issues
8	Beyond the standards: what now?
9	Developing and automating information literacy assessment instruments

Recommended reading:

Neely, T. Y. (2006). *Information literacy assessment: Standards-based tools and assignments*. Chicago: American Library Association.

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- <https://www.pdfdrive.com/information-literacy-assessment-standards-based-tools-and-assignments-d161378855.html>
- <https://books.google.com.pk/books?id=RfwbGdBKrVEC&printsec=frontcover&dq=Information+literacy+assessment:+Standards-based+tools+and+assignments.+Chicago:+American+Library+Association.&hl=en&sa=X&ved=0ahUKEwiZzvy-2pbmAhXGD2MBHeIZA2UQ6AEIJjAA#v=onepage&q=Information%20literacy%20assessment%20Standards-based%20tools%20and%20assignments.%20Chicago%3A%20American%20Library%20Association.&f=false>

SEMESTER FOUR

1. English-IV (English Literature)

Course Code: 9416

Unit#	Title
1	Introduction to Literature
2	Introduction to Poetry
3	Learning and Enjoying Poetry
4	Introduction to Novel
5	Understanding and Enjoying Novel
6	Introduction to Drama
7	Understanding Drama
8	Prose
9	Literature Revisited

<https://aiou.edu.pk/SoftBooks/9416.pdf>

2. Introduction to Statistics

Course Code: 4485

Unit#	Title
1	Introduction
2	Data Presentation
3	Data Presentation-II
4	Measures of Central Tendency-I
5	Measures of Central Tendency-II
6	Measures of Dispersion
7	Correlation & Regression
8	Probability Theory
9	Statistical Inference

<https://2012books.lardbucket.org/pdfs/beginning-statistics.pdf> (Select chapters as per course outline)

3. Planning Library Building, Space and Services

Course Code: 9205

Unit#	Title
1	Introduction and case studies of UK, USA, China, Hong Kong, Europe, and Australasia
2	(a) Library space and technology (b) Libraries information and learning (c) Key ideas on space (d) Thinking it through

3	(a) Beyond space: access is all – or is it? (b) Thinking inside the box
4	(a) Nothing has changed/everything has changed – the enduring aspects of learning (b) Books, nooks and MOOCS (c) The researcher’s view: context is critical
5	(a) Libraries in the networked society: evolution, revolution, extinction? (b) Libraries at the heart of campus life
6	(a) The library has left the building (b) Beyond analogue: the learning studio as media-age library (c) 3-d libraries for 3-d smarting
7	Learning landscapes, the library and the University of Lincoln: efficiency, effectiveness, expression and experimentation
8	Viral design: learners building better environments together
9	(a) The interior designer’s view (b) Furniture fit to the future (c) Conclusions

Recommended reading:

Watson, L. (Ed.). (2013). *Better library and learning spaces: Projects, trends and ideas*. London: Facet Publishing.

<https://books.google.com.pk/books?id=9nNTDQAAQBAJ&printsec=frontcover&dq=Better+library+and+learning+spaces:+Projects,+trends+and+ideas.+London:+Facet+Publishing.&hl=en&sa=X&ved=0ahUKEwia8vmL25bmAhWDh1wKHQcuCTIQ6AEIJjAA#v=onepage&q=Better%20library%20and%20learning%20spaces%3A%20Projects%2C%20trends%20and%20ideas.%20London%3A%20Facet%20Publishing.&f=false>

4. Collection Development and Management

Course Code: 9206

Unit#	Title
1	Introduction to collection management and development
2	Organization and staffing
3	Policy, planning, and budgets
4	Developing collections
5	Managing collections
6	Marketing, liaison, and outreach activities
7	Electronic resources
8	Cooperative collection development and management
9	Collection analysis: evaluation and assessment

Recommended reading:

Johnson, P. (2004). *Fundamentals of collection development and management*. Chicago:

American Library Association.

<http://gen.lib.rus.ec/book/index.php?md5=C1210225644D894C9E7A149743B23EFE>

5. Classification and Subject Headings

Course Code: 9208

Unit#	Title
1	Classification: Introduction
2	DDC: History, current status, and general aspects
3	DDC: Principles of number building
4	DDC: The Tables
5	DDC: The Schedules 000 - 400
6	DDC: The Schedules 500 - 900
7	Book Numbers
8	Subject headings: Introduction, principles, and grammar
9	Sears List of Subject Headings: Practice

Recommended readings:

Scott, M. L. (1998). *Dewey Decimal Classification, 21st edition: A study manual and number building guide*. Englewood, Colorado: Libraries Unlimited.

<http://gen.lib.rus.ec/book/index.php?md5=289F358EEA4B28F61D110553AE852475>

Miller, J. & Bristow, B. A. (Eds.). (2007). *Sears list of subject headings* (19th ed.). New York: The H. W. Wilson Company.

<http://www.lislinks.com/forum/attachment/download?id=2013205%3AUploadedFile%3A38323>

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6. Cataloguing and RDA

Course Code: 9209

Unit#	Title
1	Evolving standards: making the jump to RDA in historical context
2	Impact of changes in Library of Congress cataloging policy on working catalogers
3	Managing a multiplicity of standards: Hybrid approaches to traditional and digital
4	Managing vendor cataloging to maximize access
5	MARC: A new life through reusing and remixing
6	FRBR, the framework behind RDA
7	RDA in the real world: Preparing bibliographic records
8	Creating access points and understanding authority records
9	Implementing RDA into library and catalogue

Recommended readings:

Lubas, R. L. (Ed.). (2011). *Practical strategies for cataloging departments*. Westport, Connecticut: Libraries Unlimited.

<https://publisher.abc-clio.com/9781598844931>

Mering, M. (Ed.). (2014). *The RDA workbook: Learning the basics of Resource Description and Access*. Santa Barbara, Calif. : ABC-CLIO.

https://books.google.com.pk/books?id=249_AwAAQBAJ&pg=PA180&lpg=PA180&dq=Merिंग+The+RDA+workbook:+Learning+the+basics+of+Resource+Description+and+Access+pdf&source=bl&ots=nJdW7fokj9&sig=ACfU3U06ti1mrwhe715wANvK0JMC6X_Jkg&hl=en&sa=X&ved=2ahUKEwioyKzg7e7yAhWHT8AKHcJVAiQ4ChDoAXoECA4QAw#v=onepage&q=Merिंग%20The%20RDA%20workbook%3A%20Learning%20the%20basics%20of%20Resource%20Description%20and%20Access%20pdf&f=false

SEMESTER FIVE

1. Information Architecture

Course Code: 9203

Unit#	Title
1	About information architecture
2	Understanding people
3	How people look for info and think about categories
4	Understanding content
5	Content planning and classification schemes
6	Designing an information architecture
7	Testing and communicating information architecture
8	Designing navigation
9	Testing and communicating navigation

Recommended reading:

Spencer, D. (2010). *A practical guide to information architecture*. Penarth, UK: Five Simple Steps.

https://issuu.com/milko02010/docs/a_practical_guide_to_information_ar

2. Information Science in Transition

Course Code: 9207

Unit#	Title
1	Fifty years of UK research in information science; Smoother pebbles and the shoulders of giants: the developing foundations of information science
2	The last 50 years of knowledge organization: a journey through my personal archives; On the history of evaluation in IR
3	The information user: past, present and future; The sociological turn in information science
4	From chemical documentation to chemoinformatics: 50 years of chemical information science; Health informatics: current issues and challenges
5	Social informatics and sociotechnical research; The evolution of visual information retrieval
6	Information policies: yesterday, today, tomorrow; The disparity in professional qualifications and progress in information handling: a European perspective
7	Electronic scholarly publishing and Open Access
8	Social software: fun and games, or business tools?
9	Bibliometrics to webometrics; How I learned to love the Brits

Recommended reading:

Gilchrist, A. (ed.). (2009). *Information science in transition*. London: Facet Publishing.

https://books.google.com.pk/books?id=Jt4qDgAAQBAJ&printsec=frontcover&dq=Information+science+in+transition&hl=en&sa=X&ved=0ahUKEwiBr5_H4pbmAhWH2hQKHQeBAyAQ6AEIJAA#v=onepage&q=Information%20science%20in%20transition&f=false

3. Integrated Library Automation Systems

Course Code: 9210

Unit#	Title
1	Introduction and getting started
2	Evaluating integrated library system software
3	Selecting the hardware and added features
4	Working with the sales consultant
5	Timeline for the ILS project
6	Planning and budgeting
7	Writing the request for proposal and reviewing the contract
8	Implementation, installation, and training
9	Koha ILS suite: Comprehensive basic training

Recommended readings:

Webber, D. & Peters, A. (2010). *Integrated library systems: Planning, selecting, and implementing*. Santa Barbara, Calif.: Libraries Unlimited.

https://books.google.com.pk/books?hl=en&lr=&id=uqgpxajvAsQC&oi=fnd&pg=PR7&dq=integrated+library+systems+by+Desiree+Webber+and+Andrew+Peters&ots=K4zEHf66jY&sig=dRN8CtXytX38nDFrEgvjED8p0Ao&redir_esc=y#v=onepage&q=integrated%20library%20systems%20by%20Desiree%20Webber%20and%20Andrew%20Peters&f=false

Sirohi, S. & Gupta, A. (2010). *Koha 3 library management system: Install, configure, and maintain your Koha installation with this easy-to-follow guide*. Birmingham: Packt Publishing.
<https://library.nitrkl.ac.in/guide.pdf>

4. Library Public Services

Course Code: 9211

Unit#	Title
1	Introduction
2	Reference services
3	Reference sources
4	Library instruction
5	Interlibrary loan and document delivery
6	Circulation and reserve services
7	Special collections
8	Serial Services
9	Media services and government information

Recommended reading:

Evans, G. E., Amodeo, J. A., & Carter, T. L. (2005). *Introduction to library public services* (6th ed.). Greenwood Village, Colorado: Libraries Unlimited. Available at
<https://digitalassets.lib.berkeley.edu/sunsite/Library%20Services%20in%20Theory%20and%20Context,%202nd%20Edition.pdf>

5. Library and Web Technology

Course Code: 9212

Unit#	Title
1	Searching and metasearching the internet
2	Finding people and news on the net
3	Quality reference resources on the web
4	Free full-text resources
5	Internet sites for kids, and health and medical information online
6	Minding your money on the web and cyber-shopping
7	Managing web-based e-mail
8	Making and maintaining do-it-yourself web pages, and web accessibility
9	Teaching the internet, keeping up with changes, and computer troubleshooting

Recommended reading:

McDermott, I. E. (2006). *The librarian's internet survival guide: Strategies for the high-tech reference desk*. Medford, New Jersey: Information Today.

http://pustaka.unp.ac.id/file/abstrak_kki/EBOOKS/LIBRARIES%20The%20librarian's%20Internet%20survival%20guide%20%20strategies%20for%20the%20high-tech%20reference%20desk.pdf

6. Library and Database Technology

Course Code: 9213

Unit#	Title
1	Introduction and database basics
2	Setup and administration
3	Introductory programming
4	Creating reports
5	Project design
6	Programming the application
7	Security-related techniques
8	Creating public interfaces
9	Development procedures

Recommended reading:

Westman, S. R. (2006). *Creating database-backed library web pages: Using open source tools*. Chicago: American Library Association.

[https://pdf-drive.com/download.php?title=Creating%20Database-Backed%20Library%20Web%20Pages:%20Using%20Open%20Source%20Tools%20\[1ed.\]0838909108,%209780838909102,%209780838998489&content=&downurl=](https://pdf-drive.com/download.php?title=Creating%20Database-Backed%20Library%20Web%20Pages:%20Using%20Open%20Source%20Tools%20[1ed.]0838909108,%209780838909102,%209780838998489&content=&downurl=)

SEMESTER SIX

1. Modern Information Retrieval Systems

Course Code: 9214

Unit#	Title
1	(a) Basic concepts of information retrieval systems (b) Database technology and bibliographic formats
2	(a) Cataloguing and metadata (b) Subject analysis and representation
3	(a) Automatic indexing, file organization, and Vocabulary control (b) Abstracts and abstracting
4	(a) Searching and retrieval and users of information retrieval (b) User-centred models of information retrieval
5	(a) User interfaces (b) Evaluation of information retrieval systems and evaluation experiments
6	(a) Online and CD-ROM information retrieval (b) Multimedia information retrieval
7	(a) Hypertext and markup languages (b) Web information retrieval
8	(a) Intelligent information retrieval (b) Natural language processing and applications in information retrieval
9	(a) Information retrieval in digital libraries (b) Trends in information retrieval

Recommended reading:

Chowdhury, G. G. (2004). *Introduction to modern information retrieval* (2nd ed.).

London: Facet Publishing.

- <https://www.pdfdrive.com/introduction-to-modern-information-retrieval-d167667732.html>
(Also download and install [WinDjView](#) to view .djvu file)
- [https://books.google.com.pk/books?id=cN4qDgAAQBAJ&pg=PA40&dq=Chowdhury,+G.+G.+\(2004\).+Introduction+to+modern+information+retrieval+\(2nd+ed.\)&hl=en&sa=X&ved=0ahUKEwjg w4GB5JbmAhWr6uAKHW47Ce0Q6AEIJAA#v=onepage&q=Chowdhury%2C%20G.%20G.%20\(2004\).%20Introduction%20to%20modern%20information%20retrieval%20\(2nd%20ed.\)&f=false](https://books.google.com.pk/books?id=cN4qDgAAQBAJ&pg=PA40&dq=Chowdhury,+G.+G.+(2004).+Introduction+to+modern+information+retrieval+(2nd+ed.)&hl=en&sa=X&ved=0ahUKEwjg w4GB5JbmAhWr6uAKHW47Ce0Q6AEIJAA#v=onepage&q=Chowdhury%2C%20G.%20G.%20(2004).%20Introduction%20to%20modern%20information%20retrieval%20(2nd%20ed.)&f=false)
- <http://libgen.rs/book/index.php?md5=C9AEEA2A2B7979D61AEE345B5E10189F>

2. Communication Skills for Information Professionals

Course Code: 9215

Unit#	Title
1	Nonverbal behavior
2	Listening
3	Skills: Speaking
4	Skills: Writing
5	Integration: Putting it all together

6	Applications: Speaking one-to-one
7	Applications: Working in groups, and writing
8	Making presentations
9	Training others in communication skills

Recommended reading:

Ross, C. S., & Dewdney, P. (1998). *Communicating professionally: A how-to-do-it manual for library applications* (2nd ed.). New York: Neal-Schuman Publishers.

<https://books.google.com.pk/books?id=-L6gAwAAQBAJ&printsec=frontcover&dq=Communicating+professionally:+A+how-to-do-it++manual+for+library+applications&hl=en&sa=X&ved=0ahUKEwif4-6j5ZbmAhUN3BoKHTjCR8Q6AEIJAA#v=onepage&q=Communicating%20professionally%3A%20A%20how-to-do-it%20%20manual%20for%20library%20applications&f=false>

3. Developing Digital Library

Course Code: 9216

Unit#	Title
1	(a) Digital libraries: A sustainable approach (b) Digital libraries and scholarly communication
2	(a) Digitization: methods, tools, and technology (b) Tools and techniques for digital conversion
3	(a) Building digital libraries: Role of social (open source) software (b) Web 2.0 and social web approaches to digital libraries
4	(a) Information preservation and information services in the digital age (b) Digital preservation challenges, infrastructures and evaluations
5	(a) Managing change in reference and information services in digital environment (b) Digital library and repositories: A case study
6	(a) Developing collaborative digital library network: A case study (b) Intellectual property rights, copyright, permission rights and ownership: A case study
7	(a) Harnessing technology for providing knowledge for development and libraries (b) Digital library and e-governance: Sustainable rural livelihoods
8	(a) Bridging the digital divide in developing countries (b) Digital divide and economic wealth: Asia-pacific countries
9	(a) DSpace: Introduction, installation, and getting started (b) Digital library development practice with DSpace

Recommended readings:

Ashraf, T., Sharma, J., & Gulati, P. A. (2010). *Developing sustainable digital libraries: Socio-technical perspectives*. Hershey: Information Science Reference.

http://pustaka.unp.ac.id/file/abstrak_kki/EBOOKS/LIBRARIES,%20DIGITAL%20Developing%20sustainable%20digital%20libraries,%20socio-technical%20perspectives.pdf

DSPACE 5.x documentation (2015). Available at <https://wiki.lyrasis.org/display/DSDOC5x>

4. Emerging Trends in Library and Information Services

Course Code: 9217

Unit#	Title
1	(a) Cost-effective content alert system using SMS: A case study at Bundelkhand University Library, Jhansi (b) From aspiration to innovation: The Live Lab concept at the University of Glasgow Library (c) Mobilizing academic content online: Challenges and rewards
2	(a) Using iPads for a roving enquiry service: A case study on lessons learned (b) BYOD! We don't think so (c) Bridge over troubled waters: QR coding the collection for student satisfaction
3	(a) If you tweet will they follow? Promoting library resources and services to a mobile audience through social media (b) Transforming the service: Supporting mobile devices with minimal budget and time (c) M-education reaching the unreached: A Government of India initiative
4	(a) Widening access and stimulating innovation through mobile health applications (b) An education in privacy: Best practices for academic libraries in the age of social media (c) QR codes as teaching tools
5	(a) Making sure to remember what we already know: Ensuring e-reading innovation works (b) Text reference service: Ideas for best practices (c) M-libraries on the hype cycle: Where are we?
6	(a) Responsive web design for your library website (b) A new method of training users: Polimedia video for iOS and Android devices (c) Mobile phone technology in academic library services: A public university students' perceptions and paradigm
7	(a) Moving beyond the counter: mobile library support and the use of tablet PCs at Leeds University Library (b) Creating a university-wide mobile app: The mStir experience (c) Use of mobile phones for library services: The experience of Hezekiah Oluwasanmi Library, Obafemi Awolowo University, Ile Ife, Nigeria
8	(a) If you build it will they come? The importance of collaboration and marketing in developing and promoting mobile services (b) Delivering news on mobile: The European Parliament's m.Library website (c) Searching the Library catalogue through Twitter
9	(a) Mobile devices in medical schools: The WCMC-Q experience (b) Kindles in the library, National University of Ireland Maynooth Kindle Pilot 2011 (c) Conclusion

Recommended reading:

Ally, M. & Needham, G. (Eds.) (2013). *M-Libraries 4: From margin to mainstream - mobile technologies transforming lives and libraries*. London: Facet Publishing.

<https://books.google.com.pk/books?id=1oFTDQAAQBAJ&pg=PP1&dq=M-Libraries+4:+From+margin+to+mainstream+-+mobile+technologies+transforming+lives+and+libraries&hl=en&sa=X&ved=0ahUKEwiYmLT75ZbmAhWjxIUkHTVFbb0Q6AEIKjAB#v=onepage&q=M-Libraries%204%3A%20From%20margin%20to%20mainstream%20-%20mobile%20technologies%20transforming%20lives%20and%20libraries&f=false>

5. Management Basics for Information Professionals**Course Code: 9218**

Unit#	Title
1	(a) Introduction and operating environment (b) Legal issues and library management
2	(a) The planning process (b) Power, accountability and responsibility
3	(a) Delegating, and decision making (b) Communicating
4	(a) Changing and innovating (b) Assessment, quality control and operations
5	(a) Marketing and advocacy (b) Motivating
6	(a) Leading, and building teams (b) Addressing diversity
7	(a) Staffing (b) Managing money
8	(a) Managing technology (b) Managing and planning physical facilities
9	(a) Ethics (b) Planning your career

Recommended reading:

Evans, G. E. & Alire, C. A. (2013). *Management basics for information professionals* (3rd ed.). London: Facet Publishing.

6. Library Analytics and Big Data**Course Code: 9219**

Unit#	Title
Book 1	
1	Introduction: Getting the measure of analytics and metrics; Library data: Big and small
2	Data-driven collections management; Using data to demonstrate library impact and value
3	Going beyond the numbers: Using qualitative research to transform the library user experience; Web and social media metrics for the cultural heritage sector

4	Understanding and managing the risks of analytics; Case study
Book 2	
5	Introduction; Business Intelligence: What is it about?; Importance of BI Initiatives
6	Evolution of Business Intelligence; Managerial and Technical perspectives on Business Intelligence; Development Process in BI Initiatives
7	Business Intelligence Architecture; Critical Success Factors of BI Initiatives; Expert Views
8	Strategic View and BI; Recommendations; Conclusions; References and Further Reading
9	Endnotes

Recommended readings:

1. Showers, B. (Ed.) (2015). *Library analytics and metrics: Using data to drive decisions and services*. London: Facet Publishing.

<https://books.google.com.pk/books?id=dgoUDgAAQBAJ&printsec=frontcover&dq=Library+analytics+and+metrics:+Using+data+to+drive+decisions+and+services&hl=en&sa=X&ved=0ahUKEwjKycHckJnmAhXJ8eAKHUpeDrwQ6AEIJAA#v=onepage&q=Library%20analytics%20and%20metrics%3A%20Using%20data%20to%20drive%20decisions%20and%20services&f=false>

2. Kandasamy, B. P. & Benson, V. (2013). Making the most of big data: Manager’s guide to business intelligence success.

https://www.academia.edu/40051659/Making_the_Most_of_Big_Data_Managers_Guide_to_Business_Intelligence_Success

SEMESTER SEVEN

1. Library Security and Safety

Course Code: 9220

Unit#	Title
1	Surveying exteriors and grounds
2	Surveying interior public areas
3	Surveying staff-only areas
4	Security for general collections
5	Security for special collections and archives
6	Security for art, objects, and exhibits
7	Security for local and remote storage facilities
8	Security for computer equipment, electronic data, and websites
9	Insurance, safety, and security

Recommended reading:

Kahn, M. B. (2008). *The library security and safety guide to prevention, planning, and response*. Chicago: American Library Association.

http://93.174.95.29/_ads/4CFDBB476AE3958EE21354E5CE649D5F

2. Marketing of Libraries and Information Services

Course Code: 9221

Unit#	Title
1	What is marketing?
2	The corporate mission, identify and image
3	Marketing strategies for librarians and information professionals
4	The marketing mix
5	Promotion and public relations
6	Market segmentation
7	Marketing in the digital age
8	Marketing research and market research
9	The marketing plan

Recommended reading:

De Saez, E. E. (2002). *Marketing concepts for libraries and information services* (2nd ed.). London: Facet Publishing.

<https://books.google.com.pk/books?id=mvHgAAAAMAAJ&q=Marketing+concepts+for+libraries+and+information+services&dq=Marketing+concepts+for+libraries+and+information+services&hl=en&sa=X&ved=0ahUKEwj5o4yoIZvmAhXTPsAKHUDND9gQ6AEIjAA>

3. Archives, Records, and Information Management

Course Code: 9222

Unit#	Title
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1	The origins and development of records and information management
2	(a) Building an information governance program on a solid RIM foundation (b) From records management to information governance: An evolution
3	Records and information creation/capture, classification and file plan development
4	Records retention strategies: Inventory, appraisal, retention, and disposition
5	(a) Records and information access, storage, and retrieval (b) Electronic records and electronic records management systems
6	Emerging technologies and records management
7	Vital records, disaster preparedness and recovery, and business continuity
8	Monitoring, auditing, and risk management
9	(a) Inactive records management, archives and long term preservation (b) Records management education and training

Recommended reading:

Franks, P. C. (2013). *Records and information management*. London: Facet Publishing.

- [https://books.google.com.pk/books?id=CNGcAwAAQBAJ&printsec=frontcover&dq=Franks,+P.+C.+\(2013\).+Records+and+information+management&hl=en&sa=X&ved=0ahUKEwjV9vS4lpvmAhW3BGMBHSCJDI4Q6AEIjAA#v=onepage&q=Franks%2C%20P.%20C.%20\(2013\).%20Records%20and%20information%20management&f=false](https://books.google.com.pk/books?id=CNGcAwAAQBAJ&printsec=frontcover&dq=Franks,+P.+C.+(2013).+Records+and+information+management&hl=en&sa=X&ved=0ahUKEwjV9vS4lpvmAhW3BGMBHSCJDI4Q6AEIjAA#v=onepage&q=Franks%2C%20P.%20C.%20(2013).%20Records%20and%20information%20management&f=false)
- http://93.174.95.29/_ads/55FDB39DC311D3D8753350AD7ADAE122

4. Knowledge Management

Course Code: 9223

Unit#	Title
1	The nature of knowledge
2	Communities of practice
3	Organizational learning and learning organizations
4	Intellectual capital and the knowledge economy
5	Knowledge sharing
6	Knowledge representation and content management
7	Taxonomies and ontologies
8	Informatics and information technology
9	The future of knowledge management

Recommended reading:

Wallace, D. P. (2007). *Knowledge management: Historical and cross-disciplinary themes*. Westport, Connecticut: Libraries Unlimited.

http://93.174.95.29/_ads/2C85947F91FBC919AC32E77D27EA13BD

5. Auditing Information Systems

Course Code: 9224

Unit#	Title
1	Basics of Computing Systems; Identifying Computer Systems
2	Information Systems Audit Program; Information Systems Security Policies, Standards, and/or Guidelines
3	Auditing Service Organization Applications; Assessing the Financial Stability of Vendor Organizations, Examining Vendor Organization Contracts, and Examining Accounting Treatment of Computer Equipment and Software
4	Physical Security; Logical Security
5	Information Systems Operations; Control Self-Assessment and an Application in an Information Systems Environment
6	Encryption and Cryptography; Computer Forensics
7	Other Contemporary Information Systems Auditing Challenges
8	Humanistic Aspects of Information Systems Auditing; Information Systems Project Management Audits
9	Conclusion

Recommended reading:

Champlain, J. J. (2003). *Auditing information systems* (2nd ed.). New Jersey: John Wiley & Sons

<http://gen.lib.rus.ec/search.php?req=Auditing+information+systems&open=0&res=25&view=simple&phrase=1&column=def>

6. Development of Library and Information Professionals

Course Code: 9225

Unit#	Title
1	What do library workers want from professional conferences? International library conferences: the professional development benefits for librarians, the hurdles of attending and the potential outcomes
2	Moving beyond the one-shot for professional development: the value of the intensive institute experience; Growing leaders for the future
3	Providing professional development opportunities to staff in tough economic times: a guide for administrators; The benefits of internal professional development for academic librarians
4	Free or externally funded professional development for frugal librarians; Open access Web resources for library continuing education and training
5	Professional development opportunities for academic subject librarians: The advantages of professional involvement for librarians outside the profession
6	Professional development needs and resources for government documents librarians; A perfect match: partnering with education faculty for pedagogical professional development
7	Leveling the professional development playing field: opportunities and challenges in providing knowledge, skill building and targeted programming for tribal college librarians and other underserved library professionals
8	Professional development opportunities provided by consortia: what we can learn from this model; Shifting to a needs-based continuing education model

9	Assessing a statewide effort
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Recommended reading:

Hines, S. S. (2014). *Revolutionizing the development of library and information professionals: Planning for the future*. Hershey: Information Science Reference

SEMESTER EIGHT

1. Research Methodology in Library and Information Sciences Course Code: 9226

Unit#	Title
1	Research and librarianship
2	Developing the research study
3	Selecting the research method
4	Survey research and sampling
5	Data collection techniques
6	Experimental and historical research
7	Qualitative research methods
8	Analysis of data
9	Writing research proposal and research report

Recommended reading:

Connaway, L. S., & Powell, R. R. (2010). *Basic research methods for librarians* (5th ed.). Santa Barbara: Libraries Unlimited.

2. Evaluation of Library and Information Services Course Code: 9228

Unit#	Title
1	Introduction
2	Reasons for evaluation and related factors
3	Identifying performance issues for evaluation
4	Quantitative methods
5	Qualitative methods
6	Pitfalls and progress
7	Case studies
8	Future developments
9	Performance measurement for the electronic library

Recommended reading:

Crawford, J. (2015). *Evaluation of Library and Information Services*. 2nd Edition. London: ASLIB.

3. Project Management in Libraries, Archives and Museums Course Code: 9229

Unit#	Title
1	What does project management mean?
2	Project planning and review

3	Working in project partnerships
4	Risk management
5	Managing human resources within a project
6	Managing other project resources
7	Evaluation and review
8	Quality management in projects
9	(a). Sustainability of projects (b). Using information and communication technology in project management

Recommended reading:

Carpenter, J. (2010). *Project management in libraries, archives and museums: Working with government and other external partners*. London: Elsevier.