

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) |

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 |

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 |

4. Introduction to Logic

Course Code: 8413

| Unit# | Title |
|-------|---|
| 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*. <https://bookboon.com/premium/books/soft-skills> (Login required).

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 |

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 |

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 |

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 |

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://pdfs.semanticscholar.org/5531/447b48d67c61bc6458bb4d316115e5a1db78.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 |

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 |

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 |

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 |

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 |

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.

- <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-2pbmAhXGD2MBHeIzA2UQ6AEIJAA#v=onepage&q=Information%20literacy%20assessment%3A%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 |

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 |

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%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://api.ning.com/files/UosqTfXFuFGPXsobch1cYPy1fqCkxEMS2rNTmSJbmtEDpdLYmpS2yGRCzN9hB8healgxrlrtuLCqVtZedFqbywMWUhAn55r/sears>

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.

http://93.174.95.29/_ads/CD0735E48AAAFDE878A62ECA1A6FB015

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

http://93.174.95.29/_ads/240431CEA2044C6797CBB3036795474E

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.

http://93.174.95.29/_ads/9D52FA512E969736D37776D75FF11AD1

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_H4pbmAhWH2hQKHQeBAyAQ6AEIJjAA#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.
<http://93.174.95.29/ads/072DCBD64BD0986A54C1F96FF753DCCF>

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.
<http://93.174.95.29/ads/F65BF38D54C3453909FFA8F41BE42D51>

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.

[https://books.google.com.pk/books?id=OmUhAQAAIAAJ&q=Introduction+to+library+public+services+\(6th+ed.\)&dq=Introduction+to+library+public+services+\(6th+ed.\)&hl=en&sa=X&ved=0ahUKEwinn-WV45bmAhXK5eAKHdVSCfMQ6AEIJjAA](https://books.google.com.pk/books?id=OmUhAQAAIAAJ&q=Introduction+to+library+public+services+(6th+ed.)&dq=Introduction+to+library+public+services+(6th+ed.)&hl=en&sa=X&ved=0ahUKEwinn-WV45bmAhXK5eAKHdVSCfMQ6AEIJjAA)

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.

https://books.google.com.pk/books?id=CcvzSf4jm9oC&printsec=frontcover&dq=The+librarian%27s+internet+survival+guide:+Strategies+for+the+high-tech+reference+desk&hl=en&sa=X&ved=0ahUKEwjZj_3H45bmAhXc8OAKHTqkBUEQ6AEIJjAA#v=onepage&q=The%20librarian's%20internet%20survival%20guide%3A%20Strategies%20for%20the%20high-tech%20reference%20desk&f=false

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.

<http://93.174.95.29/ads/B8FFE3548207B3591BDBA521DC25B771>

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>
- [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)
- <https://ebookey.org/search.php?q=introduction+to+modern+information+retrieval&sa=Search>
- http://gen.lib.rus.ec/search.php?req=introduction+modern+information&lg_topic=libgen&open=0&view=simple&res=25&phrase=1&column=def

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 |

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| 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://93.174.95.29/_ads/B2C018DF18420DBF5A0E55C412647920

DSpace 5.x documentation (2015). Retrieved November 15, 2015, from <https://wiki.duraspace.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 |

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| | (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=0ahUKEwiYmLT75ZbmAhWjxIUkHTVFb0Q6AEIKjAB#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 |

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| | (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.

https://books.google.com.pk/books?id=2HvpxwEACAAJ&dq=Management+basics+for+information+professionals&hl=en&sa=X&ved=0ahUKEwiL5_aY5pbmAhXN7eAKHSE6C1QQ6AEILzAB

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. www.bookboon.com

<http://93.174.95.29/ads/EC133CCE54AA14A53992645E9C31BF95>

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/4CFDDBB476AE3958EE21354E5CE649D5F

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=0ahUKEwj5o4yolZvmAhXTPsAKHUDND9gQ6AEIJjAA>

3. Archives, Records, and Information Management

Course Code: 9222

| Unit# | Title |
|-------|---|
| 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 |

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| 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 |

Recommended reading:

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

<http://93.174.95.29/ads/CD8D377A1C4A7C7F7246DA6956849335>

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.

<http://93.174.95.29/ads/E5E93CDB60AAAC65F371A9424ADB055B>

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.

http://93.174.95.29/_ads/F85355ACED759B7A3626302E7AD65704

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.

http://93.174.95.29/_ads/EC1D796563B8008CF93EF6E7D381BA5E