

HEMCHANDRACHARYA NORTH GUJARAT UNIVERSITY

PATAN -384265

NAAC Accreditation 'B' Grade with 2.55 CGPA

&

ISO 9001:2008 Certified Gujarat's 1st University

FACULTY OF ARTS



Syllabus

Of

MASTER OF PHILOSOPHY

IN

LIBRARY & INFORMATION SCIENCE

With Semester/CBCS/Grading Pattern

W.E.F. June - 2014

DEPARTMENT OF LIBRARY & INFORMATION SCIENCE
Hemchandracharya North Gujarat University, PATAN (Gujarat)

ABOUT M.PHIL.PROGRAMME IN LIBRARY & INFORMATION SCIENCE

Rules Governing Semester System in the M.Phil. Programme:

1. There are 02 (Two) semester in the M.Phil. Programme
2. There are 03 (Three) and 02 (Two) papers in first and second semester respectively.
3. There shall be 100 Marks (4 Credits) in each course/paper excluding dissertation of which Internal Marks shall be 30 % and External Marks shall be 70 %. There shall be Examination of three Hours duration in each course/paper for External Marks. 200 marks for dissertation.
4. For Internal Marks (30 % of 100 Marks) can be given from continuous evaluation i.e. Written Examination, Seminar , Assignment etc..

Semester I					
Paper No.	Title	Internal Mark	External Mark	Total	Credit
Core 101	Research Methodology	30	70	100	04
Core 102	Information Sources, Services and System	30	70	100	04
Elective 103 or 104	Current Trends in Library & Information Science	30	70	100	04
	Digital Library Systems				
	Total			300	12
Semester II					
Core 201	Advances in library Management	30	70	100	04
Core 202	Dissertation			200 (50 Viva)	08
	Total			300	12

- Name of Programme : Master of Philosophy in Library & Information science
- Programme Code : M.Phil
- Objectives : 1) To make the student proficient in method and technique of research and their application to the problems in Library and Information Science
2) To give the student specialized knowledge in respect of selected areas in Library and Information Science
3) To prepare the student for further research leading to Ph.D. or other research degree.
- Admission Eligibility : As per University rules.
- Duration : One Year (Two Semester)
- Credit : 24 Credits
- Teaching Learning Method : Lectures, Students Seminars, Library Consultation etc
- Evaluation Scheme : Continuous Evaluation 30 Marks
Summative Evaluation 70 Marks

Total 100 Marks
- Passing Percentage : As per University regulation

DEPARTMENT OF LIBRARY & INFORMATION SCIENCE
SYLLABUS FOR M.PHIL PROGRAMME

Semester I

Core 101: Research Methodology

Objectives:

1. To give an advanced exposure to the students about the research and development.
2. To develop acquaintance with intensive and skill of research process.
3. To familiarize the art style of writing a research report.

1. Research : General

- Meaning, Need and Purpose
- Spiral Scientific Method
- Types of Research: Pure, Applied and Action
- Kinds of Research: Diagnostic, Descriptive, exploratory
- Research Ethics

2. Typology for Literature Search

- Typology for literature search
- Scientific method: components
- Formulation of research problems

3. Research Design

- Types of research design: Historical design, Descriptive design,
- Formulation of Hypothesis, Synopsis Writing

4. Research Methods

- Brief review of general research methods
- Research methods in LIS
- Use and user study
- Content analysis
- Field study
- Advance future research: Delphi Technique

5. Data Collection Technique

- Sampling
- Interview
- Observation
- Questionnaire
- Bibliometrics
- Web metrics etc

6. Data Analysis & Interpretation

- Geographical & Graphical presentation of Data
- Statistical analysis: Measures of Central Tendency, Measure of Dispersion, Regression, correlation and Chi-Square Test
- Statistical Package : SPSS, Excel
- Tools of argument: Definition, analysis, interpretation, Inference

7. Research Reporting

- Structure, Style and Contents
- Style Manuals: Chicago, APA, MLA
- Citation Style: Footnotes, References
- Evaluation of research
- Current trends in LIS: Advanced countries, Less- Advanced countries and Global

Note: Continuous Internal Evaluation

1. Assignment	10
2. Class Room Seminar	10
3. Internal Exam	10
Total Marks	30

- **Recommended Books:**

1. Busha, Charles, H. and Harter, Stephen, S. Research Methods in Librarianship. Techniques and Interpretation. Orlando, Academic press, 1980
2. Charles, H. et.al. Research Methods in Librarianship: Techniques and Interpretations, New Delhi, Sage, 1993
3. Fowler, F.J. Survey Research Methods. New Delhi, Sage, 1993
4. Goode, W.J and Hatt, P.K. Methods in Social Science Research. New Delhi, McGraw Hill, 1986
5. Leddy, Paul. D Practical Research: Planning Design. London, Clive Bingley. 1980
6. Line, M.B. Library Surveys, London Clive Bingley, 1967
7. Nicholas, D and Ritchie, M Literature and Bibliometrics. London Clive Bingley, 1979
8. Ravichandra Rao. I.K Quantitative methods for Library and Information Science, New Delhi, Wiley Eastern, 1985
9. Slater, M. Research Methods in Library and Information Studies. London, L.A, 1990
- 10 Stevens, R.E. Ed. Research Methods in Librarianship. London, Clive Bingley,

- **Recommended Journals:**

1. Library and Information Science Research. Publisher: Elsevier BV, Netherlands. ISSN: 07408188. H Index: 29
2. Research Evaluation. Publisher: Beech Tree Publishing. United Kingdom ISSN: 09582029, 14715449. H Index: 20

Core 102

Information Sources, Services and Systems

Objectives:

1. To inform the various information sources.
2. To inform the National & International information systems.
3. To familiarize the library services.

1. Information Sources

- 1.1 Information Sources, Division of Documentary Sources by S.R.Ranganathan and Hanson Documentary.
- 1.2 Grogan Documentary Sources, Documents Information Sources and Non Documents Information Sources (Primary, Secondary, Tertiary and Non Book Materials.)
- 1.3 Documentary Sources: Print and Non Print Media, Components of Print Media, Multimedia, Non Book Media, Electronic Media and Optical Media
- 1.4 Aids to Information Sources Table of Contents, Indexes list of tables, list of illustrations, Explanatory Notes, Abstracting and Indexing Services.

2. Information Institution Product and Services

- 2.1 Evolution of Information Institutions, Types of Information Institutions. (Libraries, Information analysis centers, Data centers, Referral centers.
- 2.2 Information Products. (Information news letters, House Bulletins and Journals)
- 2.3 Information analysis and Consolidation centers. (Information analysis and Consolidation Need, Categories, Activities, Users, Types of Products.)
- 2.4 Trade and Product Bulletins: Characteristics, Functions, Types
- 2.5 National Trade and Product Bulletin.
- 2.6 Database: Types and Users.
- 2.7 Online Information Systems and Information Network.

3. International and National Information Systems

- 3.1 UNESCO, IFLA, FID, UNISIST, AGRIS, INIS AND MEDLARS.
- 3.2 Institutional Information Sources and Types of Information Institutions (Library, Documentation Centers, Clearing House, Referral Centers, Data Centers and Information Analysis Centers.
- 3.3 NISSAT, ENVIS (Environmental Information System), BTIS (Biotechnology Information System), NASSDOC, NISCAIR AND SENDOC

Note: Continuous Internal Evaluation

1. Assignment	10
2. Class Room Seminar	10
3. Internal Exam	10
Total Marks	30

• **Recommended Books/Websites:**

1. Gupta, B M. Hand Book of libraries Achieves and Information Centres in India. Published by Segment Books, New Delhi, 1996
2. Krishna Kumar. Reference Service. Vikas Publishing House, New Delhi, 1978
3. Biswas, Subhas C. Global Trend in Library and Information Sciecne. Gyan Publishing House, 1995
4. Bopp, Richard E and Smith, Linda C. Reference and Information Services: An introduction.Greenwood publishing Group, Englewood, 2000
5. www.ifla.org
6. www.iaea.org/inis
7. www.icssr.org
8. www.nimsme.org
9. www.niscair.res.in
10. www,envis.nic.in

Elective 103

Current Trends in Library & Information Science (Elective I)

The aim of the paper is to introduce current trends in Library & Information Science

Objectives:

- To create understanding among the students about the emerging role of ICT.
- To give an extensive exposure to the application of ICT in LIS.
- To create friendly acquaintance with the converging technologies.

1. Information and Communication Technology

- Origin and Growth
- Role of ICT in the development of LIS Centers
- Librarianship 2.0

2. Digital Libraries

- Concept, need, Characteristics
- Infrastructural facilities & digitization software (D Space, Greenstone etc...)
- Planning of Digitization
- Content creation for DL
- Intellectual Property Right Issues (IPR)
- Digital Collection (e-books, e-journals)
- Collection development
- Organization and preservation

3. Services of Digital Libraries

- Consortia (J-gate, Infonet, Indest, Jstor)
- Portals, Votals and Gateways
- Digital libraries in the world

4. Relational Database Management System (RDBMS)

- Introduction and Concept of RDBMS

- DBMS vs RDBMS
- RDBMS software: Proprietary and open source
- Interfaces for RDBMS using SQL
- Development of database using MySQL

5. Networks and Security measures

- Network Components: UTP, Optical Fibers, Ethernet Network Interface card, Hub,
- Routers, Modems and requirement of Wi-Fi
- Planning of computer networks in library and Information centers
- Network Security measures
- Internet security.

6. Information Literacy

- Concept, need
- Methods of imparting information literacy programmers
- Contents of information literacy programmers
- ACRL standards for information literacy

7. Library Science Education

- Curriculum Design (role of UGC in curriculum development)
- Accreditation of LIS courses
- Continuing education for Library & Information Personnel

8. Partnership with Different Agencies

- Concept, need
- Agencies (teaching departments, government bodies at national and International Level)

Note: Continuous Internal Evaluation

1. Assignment	10
2. Class Room Seminar	10
3. Internal Exam	10
Total Marks	30

- **Recommended Books:**

1. Carter, Roger: The Information Technology Hand Book, London, and Henemann, 1987.
2. Jeanne, F. M. A Librarian's Guide to the Internet: A Guide to searching and evaluating information, Oxford: Chandos publishing, 2006
3. Lancaster, F.W. Electronic publishing and their implications for libraries and beyond, London, Clive bingley, 1990
4. Lucy, A. Tedd. An Introduction to computer based library system. Ed.3 Chinchester, Wiley, 2005
5. Richard Jones. The Institutional Repository. Oxford, Chandos publishing, 2006
6. Vishwanathan. T. Communication Technology. New Delhi, T.M.H. 1995
7. Zorkoczy, Peter: Information Technology: An introduction, London, Otiman, 2005
8. Gorman, G.E. Digital factor in Library and Information Services. London: Facet publishing, 2002.
9. Haynes, David. Metadata for Librarianship in India.London: Greenwood Press, 2004
10. Patel, Jashu. Libraries and Librarianship in India.London, Greenwood Press, 2001

Elective 104

Digital Library System (Elective II)

Objectives

- To acquaint the students with the concepts of digital and virtual library
- To develop skills in organization of digital information bearing objects
- To understand major issues in architecture, retrieval and user interface
- To know the process of design and development of digital library systems
- To familiarise students with multiscript/multilingual library systems

Unit I: Historical and Theoretical Foundations

- Nature, concepts, scopes, definitions and types of digital libraries
- History of digital library initiatives, institutional repositories and open knowledge movement
- Social, legal and economic issues
- Digital information resources and Digital archiving
- Digital information resources – features, types and bitstream formats
- Analog (traditional) vs. Digital information resources
- Digital archiving – features, advantages and applications
- Traditional, automated, digital and virtual library systems – comparative study

Unit II: Organisation of Digital Objects

- Metadata – generic and domain-specific schemas (Including DCMES, GILS, AGLS, ONIX, TEI, IEEE LOM, GEMS, SeamlessUK etc.)
- Metadata encoding –
- Markup languages – HTML, XHTML, XML
- Encoding standards – W3C and IETF standards
- Resource Description Framework (RDF)
- Resource identifiers (Naming services) – URN, URI, CNRI's handle, PURL, DOI
- Subject access systems – standards and tools
- Crosswalks and Interoperability
- Crosswalks of metadata schemas

- Interoperability – OAI/PMH, Z 39.50, ZING and SRW; OAI/PMH Vs. Z 39.50

Unit III: Architecture

- Information Retrieval and User interfaces
- Web architecture
- Distributed information system (Internet)– architecture, standards, protocols and tools
- World Wide Web – features, services, standards, protocols, tools and services
- Web technologies and access systems
- Common Gateway Interface (CGI) – architecture and programming tools (PERL, PHP, JSP)
- Web databases
- Web-enabled DBMS – Relational and Bibliographic DBMS
- Technologies, standards and tools
- Products and services
- Architecture of digital library systems
- Design issues
- Design principles
- Models
- Information retrieval in digital library systems
- Information retrieval models for digital library systems
- Use of vocabulary control devices
- Text retrieval tools – types, features and comparisons (Lucene, MGPP, HTDig, SWISH-e)
- Search techniques – Boolean, relational and positional operators (including Post Boolean development)
- Study of information retrieval features of selected digital library systems
- User interfaces of digital library systems
- Information seeking behaviour - models
- Information access framework
- Design issues, principles and standards

- Study of user interfaces of selected digital library systems

Unit IV: Design and Development of Digital Library System

- Digitization and Collection development
- Hardware
- Software
- Process
- File formats
- Issues, policies and principles
- Collection management
- Tools for developing digital library systems
- Free/Libre Open Source Software (FLOSS)
- Systems software – Unix-like operating systems (Unices)
- Application software – LAMP/XAMP architecture
- Social networking tools – Web 2.0 and Library 2.0
- Open standards
- Standards related to digital library systems
- Standards for multilingual digital library systems
- Design principles
- Centralized processing and distributed access systems
- Software – GSDL, MyLibrary, WWWISIS, GENISIS etc.
- Building Process
- Customization and user interface
- Distributed processing and distributed access systems
- Software – DSpace, E-Print Archive, Fedora etc.
- Building Process
- Customization and user interface
- Evaluation of digital library systems
- National digital library systems
- International digital library systems
- Evaluation parameters and models

- Evaluation of selected digital library systems

Unit V: Indic script based digital library systems

- Multilingual digital library systems – concepts, features, needs
- Indic scripts and script encoding technologies
- Multilingual standards and tools –
- Unicode text encoding standard
- Rendering engines
- Open type fonts
- Application of open source software and open standards
- Building process and customization techniques

Note: Continuous Internal Evaluation

1. Assignment	10
2. Class Room Seminar	10
3. Internal Exam	10
Total Marks	30

- **Recommended Books**

1. Argerich, K.: Professional PHP programming. Mumbai: SPD/Apress Reprints, 2004.
2. Arms, W.: Digital libraries. Cambridge MA: MIT Press, 2000.
3. Bayross, I.: Using Apache, MySQL, PHP and PERL on Linux. New Delhi: BPB Publications, 2000.
4. Bayross, I.: Using MySQL on Linux. New Delhi: BPB Publications, 2004.
5. Bhatnagar, S.: Information and communication technology in development: cases from India . New Delhi: Sage, 2002.
6. Birbeck, M. and Duckett, J.: Professional XML (2nd ed.). Mumbai: Shrof Publishers, 2004.
7. Borgman, G.L.: From Gutenberg to the global information infrastructure: access to information in networked world. Cambridge MA: MIT Press, 2000.
8. Briggs, A.: The definitive guide to user mode Linux. Mumbai: Shrof Publishers, 2005.

9. Brophy, P.: The library in the twenty-first century. London: Library Association, 2001.
10. Caplan, Priscilla: Metadata fundamentals for all librarians. Chicago: ALA, 2000.
11. Chowdhury, G.G. & Chowdhury, S.: Introduction to digital libraries. London: Facet Publishing, 2003.
12. Crawford, W. and Gorman, M.: Future libraries: dreams, madness, and reality. Chicago: ALA, 1995.
13. Deegan, M. & Tanner, S.: Digital futures: strategies for the information age. London: Library Association, 2003.
14. Fabisoff, S.G., & Ely, D.P.: Information and information needs. Washington D.C: US Office of Education, 1974.
15. Gorman, G.E. & Dorner, D.G.: Metadata applications and management. London: Facet Publishing, 2004.
16. Lesk, M.: Practical digital libraries: books, bytes and bucks. San Francisco: Morgan Kaufmann, 1997.
17. Library Trends: Special issue: Assessing digital library services (Edited by Thomas A. Peter), 49(2), 2000.
18. Marchionini, G.: Information seeking in electronic environments. Cambridge: Cambridge University Press, 1995.
19. Meadow, C.T., Boyce, B.R. & Kraft, D.H.: Text information retrieval systems (2nd ed.). San Diego: Academic Press, 2000.
20. Myers, D.: Professional Java XML programming with servlet and JSP. Mumbai: Shroff Publishers, 2004.
21. Raymond, E. S.: The cathedral and the bazaar: musings on Linux and open source by an accidental revolutionary (Rev. ed). Cambridge: O'reilly and Associates Inc, 2001.
22. Tanenbaum, A.S.: Computer networks (3rd ed.). New Delhi: Prentice-Hall (India)

Semester II

Core 201 : Advances in library Management

Objectives:

1. To train the students to become effective Information managers
2. Acquainting the students with emerging management skills and techniques.

1. Schools of Management

- Principles of Scientific Management
- Comparative analysis of Recent managerial, Philosophies and Practices

2. Human Resource Management

- Personnel Management
- Human Relations
- Communication & Managerial Skills
- Crisis & Time Management

3. Financial Management

- Space Planning Strategies & approaches
- Planning & Methods
- Planning & Budgeting
- Methods & Budgeting
- Cost effective & Cost benefit analysis

4. Performance evaluation and measurement

- Techniques & Methods
- Evaluation of Library Services & Products
- SWOT Analysis
- Re- Engineering of Library Services

5. Knowledge Management

- Technology Management
- Marketing Skill & Techniques
- Collection development policies & procedures (By taking individual libraries i.e. needs based collection development)

- Total Quality Management i.e. TQM

6. Recent management Techniques

- Out sourcing
- Six Sigma
- Brain Storming
- Mind Mapping & Other recent techniques

Note: Continuous Internal Evaluation

1. Assignment	10
2. Class Room Seminar	10
3. Internal Exam	10
Total Marks	30

- **Recommended Books:**

1. Brophy, Peter and Courling Kote, Quality Management for Information and Library Managers. Bombay: Jaico, 1997
2. Bryson, J.O. Effective Library and Information. Bombay: Jaico, 1996
3. Evans, Edward g. Ed. Management Information Systems. New Delhi S. Chand & Co.
4. Katz, W.A Collection Development Selection of Materials for Libraries. New York; HRW. 1980
5. Martino, R.L. Information Management: Dynamics of Management information Systems. New York. McHill, 1969
6. McDick, Robert G. Et.al. Information Systems for Modern Management. New Delhi: Prentice Hall, 1992
7. Paliwal, P.K Compendium of Library Administration. New Delhi: Ess Ess 2000
8. Parker, Charles and Café. Thomas. Management Information Systems: Strategy and Action. New York: McGraw Hill, 1993
9. Pearson, R.J Ed. Management Process: Selection of Reading for Librarians. Chicago: ALA, 1983
10. Stuert, Robert. D and Moran, Barbara B. Library and Information Centres Management. Colorado: Libraries unlimited, 2004
11. Narayana, G.J. Library and Information Management. New Delhi: PHI, 1991

Core 202
Dissertation

Dissertation Writing : 150 Marks
Viva-Voce : 50 Marks