M. Phil in Library & Information Science Programme (Two Years Course) (4 Semester)

| Course | Course Title | C/E/F | Credits | | | | Marks | |
|-----------------------|---|-----------|---------|---|---|----|-----------|-----------|
| 1st Year 1st Semester | | | L | Т | P | С | Exam | IA |
| | | | | | _ | | | |
| MPLIS-01 | Frontiers in Library & | С | 2 | 0 | 1 | 3 | 50 | 00 |
| | Information Science | | | | | | | |
| MPLIS-02 | Research Methodology | С | 2 | 0 | 1 | 3 | 50 | 25 |
| MPLIS-03 | Quantitative | С | 2 | 0 | 1 | 3 | 50 | 25 |
| | Techniques | | | | | | | |
| MPLIS-04 | Software in LIS Studies | С | 0 | 0 | 3 | 3 | 00 | 50 |
| | Sub Total | | 6 | 0 | 6 | 12 | 150 | 100 |
| | 1st Year 1st Semester | Credit=12 | | | | | Marks=250 | |
| <u> </u> | Total | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | Year 2 nd Semester | | | | | | | |
| MPLIS-05 | Philosophy of Library | C | 2 | 0 | 1 | 3 | 50 | 25 |
| | & Information Science | | | | | | | |
| MPLIS-06 | Ranganathan Study | С | 2 | 0 | 1 | 3 | 50 | 25 |
| MPLIS-08 | Digital Information | С | 0 | 0 | 4 | 4 | 00 | 100 |
| | Sources in LIS | | | | | | | |
| | Research | | | | | | | |
| | Sub Total | | 4 | 0 | 6 | 10 | 100 | 150 |
| | 1st Year 2nd Semester | Credit=10 | | | | | Marks=250 | |
| | Total | | | | | | | |
| 1 - | | | | | 1 | | | |
| 2 ^{na} Yea | ar 1 st Semester & 2 nd | | | | | | | |
| MDI IC CO | Semester | C | | | | 0 | 1.50 | 50 |
| MPLIS-09 | Dissertation | С | 0 | 8 | 0 | 8 | 150 | 50 |
| | 2 nd Year Total | Credit=8 | | | | | Marks=200 | |
| Course Total | | Credit=30 | | | | | Marks=700 | |

M.PHIL (LIS) Syllabus

1st Year 1st Semester

(This will run simultaneously with Ph.D. course work)

Paper Code: MPLIS-01

Paper Name: FRONTIERS IN LIBRARY & INFORMATION SCIENCE

The course will identify the latest developments and research in LIS domain. Some of the topics are enumerated below. Any relevant topic will be included here.

- New theories, models, methods, tools in LIS domain
- Advances in information organization and control e.g., Web ontology, semantic web, Taxonomy, RDA, Bibframe
- Interdisciplinarity in LIS domain
- Various Open movements and Libraries
- Information behaviour in digital environment
- Information overload
- Changing role of public libraries
- Technology adoption
- Big data applications in libraries
- Challenges in LIS education & profession

- Chen, C. & Larsen, R. (Eds.). (2014). *Library and information sciences: Trends and research*. Heidelberg: Springer.
- Davies, J., Studer, R. & Warren, P. (2006). Semantic Web technologies: Trends and research in ontology-based systems. Chichester, England: John Wiley.
- Deards, K.D. & Springs, G.R. (2014). Succession planning and implementation in libraries: Practices and resources. Hershey, PA: Information Science Reference.
- Gutiérrez, C.R. (Ed.).(2012). Advances in knowledge representation. Rijeka, Croatia: InTech.
- Hansson, T. (Ed.).(2008). *Handbook of research on digital information technologies : Innovations, methods, and ethical issues.* Hershey, PA: Information Science Reference.

Katsirikou, A. (Ed.). (2011). *Open Access to STM information: Trends, models and strategies for libraries*. Berlin: Walter de Gruyter.

Kock, N. (Ed.). (2010). Evolutionary psychology and information systems research: A new approach to studying the effects of modern technologies on human behavior. New York: Springer.

McGrath, W.E. (Ed.). (2002). Current theory in library and information science. *Library Trends: Special issue*, 50(3),309-574.

Melucci, M. & Baeza-Yates, R. (Eds.). (2011). *Advanced topics in information retrieval*. Berlin: Springer.

Yu, H. & Breivold, S. (2008). *Electronic resource management in libraries : research and practice*. Hershey, PA: Information Science Reference.

Paper Code: MPLIS-02

Paper Name: RESEARCH METHODOLOGY

- Concept, meaning, objectives and processes of research. Problems of research. Research
 question. Types of research. Basic and Applied research, Descriptive, Experimental and
 Analytical research, Quantitative and Qualitative research, Conceptual research. Ethical
 aspects of research.
- Research Design and Methods. Meaning, need and features of good research design.
 Identification and formulation of problem; Hypothesis: Types of research design. Stages of research and designing research proposal. Literature search- Print, Non-Print and digital resources. Descriptive, Historical, Scientific methods. Experimental and Delphi method. Survey method. Case study method.
- Data collection, Data Analysis, Reporting. Data collection, survey method, Sampling techniques. Data collection tools: Questionnaire, Schedule, Interview, Observations, Scales. Data analysis and interpretation. Data presentation-tabulation, graphical

- presentation, use of statistical packages. Research reporting: structure, style, contents, guidelines, quality parameters and citation.
- Trends in Researches. Research scenario in Science and Technology. Collaborative researches, Relay research. Library and Information Science research. Impact of new technologies, e-citation, on-line survey, Webliography, Organizations, Institutions, Experts.
- Technical Writing and Editing. Definition and attributes of technical writing. Documentation and referencing. Jobs of editor. Proof correction.

- American Psychological Association.(2010). The publication manual of the American Psychological Association (6th ed.). Washington, DC: APA.
- Best, J.W. & Kahn, J.V. (2006). Research in education. 10th ed. Boston: Pearson.
- Busha, C. & Harter, S. (1980). Research methods in librarianship: techniques and interpretations. New York: Academic Press.
- Bushaway, R. W. (2003). Managing Research. Maidenhead, England: Open University Press.
- Connaway, L.S. & Powell, R. R. (2010). *Basic research methods for librarians*. (5th ed.). Santa Barbara, CA: Libraries Unlimited.
- Gerson, S. J. & Gerson, S. M. (1992). *Technical writing: Process and product*. Englewood Cliff's: Prentice Hall.
- Gorman, G.E. & Clayton, P. (2004). *Qualitative Research for the Information Professional: A practical handbook* (2nd ed.). London: Facet Publishing.
- Huckin, T. N. & Olsen, L. A. (1991). *Technical writing and professional communication for non-native speakers of English*. (2nd ed.). New York: McGraw-Hill.
- Khan, M. A. (2002). *Research methods in library and information science*. New Delhi: Cosmo Publications.
- Kothari, C.R. (2004). *Research methodology : methods and techniques* (2nd rev. ed.). New Delhi : Wiley Eastern Publishers.

- Krishan Kumar (1992). Research methods in library and information science. New Delhi: Vikas Publishing House.
- Kuhn, T.S. (1996). *The structure of scientific revolutions*. (3rd ed.). Chicago: University of Chicago Press.
- Lawal, I. O. (2009). Library and information science research in the 21st century: a guide for practicing librarians and students. Oxford, UK: Chandos Pubishing.
- Modern Language Association of America. (2008). *MLA style manual and guide to scholarly publishing*. (3rd ed.). New York: MLA.
- Moore, N. (2006). How to do research (3rd ed.). London: Facet Publishing.
- Neelameghan, A. (1975). *Presentation of ideas in technical writing*. New Delhi: Vikas Publishing House.
- Ohdedar, A.K. (1993). Research methodology. Calcutta: Bengal Library Association.
- Rubens, P. (2001). *Science and technical writing :A manual of style* (2nd ed.). New York: Routledge.
- Simpson, I. S. (1990). How to interpret statistical data: A guide for librarians and information scientists. London: Library Association.
- Slater, Margaret, (Ed.). (1990). *Research methods in library and information studies*. London: Library Association.
- University of Chicago. (2010). The Chicago manual of style . (16th ed.). Chicago: University of Chicago Press

Paper Code: MPLIS-03

Paper Name: QUANTITATIVE TECHNIQUES

Statistical methods - Introduction. Measures of Variability and skewness. Sampling & sample designs. Correlation studies and regression analysis. Hypothesis testing, Null and Alternative Hypothesis, Sampling error, Chi-Square test. Analysis of Variance and Covariance. Multivariate Analysis Techniques. Time series – Components, measurement of trend and statistical fluctuations.

- Operations Research (OR) Meaning, nature, methodology and utilities. OR techniques. .Work study. Queuing theory. Game theory. Network analysis. CPM and PERT.
- Project using statistical packages e.g., R.

Suggested Readings:

- Albert, J. & Rizzo, M. (2012). R by example. New York: Springer.
- Braun, W.J. & Murdoch, D.J. (2007). *A first course in statistical programming with R*. Cambridge, N.Y.: Cambridge University Press.
- Gun, A.M., Gupta, M.K. & Dasgupta, B. (2008). Fundamentals of Statistics. (8th rev. ed.). 2 vols. Kolkata: World Press, 2008.
- Hafner, A.W. (1988). *Descriptive statistical techniques for librarians*. Chicago: American Library Association.
- Mustafi, C.K. (2012). *Operations research: Methods and practice*. New Delhi: New Age International Publisher.
- Pal, M.N., Chatterjee, A.K. & Mukherjee, S. K. (1991). *Introduction to work study* (3rd rev ed.). New Delhi: Oxford and IBH Publishing.
- Ravichandra Rao, I.K. (1983). *Quantitative methods for library and information science.*, New Delhi: Wiley Eastern.
- Sehgal, R.L. (1998). Statiscal techniques for librarians. New Delhi: Ess Ess Publications.
- Simpson, I. S. (1988). *Basic statistics for librarians* (3rd ed.). London: Library Association.
- Taha, H.A. (2014). *Operations research: An introduction* (9th ed.). New Delhi: Pearson Education India.

Paper Code: MPLIS-04

Paper Name: SOFTWARE IN LIS STUDIES

course will identify various software required for LIS research. The students will learn to install and handle these software independently. Some examples are given below. Any other software to be added as needed.

- Content management software e.g., Drupal, Joomla, Moodle, Wordpress
- Concept mapping software e.g., CMapTools

- Data and text mining software e.g., Weka
- Database management software e.g., MariaDB, MySQL, PostgreSQL
- Digital library software e.g., DSpace, E-Print
- Enterprise search engines e.g., Lucene, Solr
- Graphics software e.g., GIMP
- Information visualization software, e.g., GraphViz, Xmdvtool
- Knowledge networking software e.g., Pajero
- Knowledge management software e.g., Xmind
- Library automation software e.g., Koha, Evergreen
- Middleware software e.g., JBoss, Jakarta Tomcat
- Mind mapping software e.g., Freemind, Coggle
- Reference management software e.g., Zotero
- Resource discovery software e.g., Vufind
- Semantic web tools e.g., Protégé
- Virtual Machine Emulator e.g., VMWare
- Wiki software e.g., MediaWiki

Suggested Readings:

Bartholomew, D. (2014). MariaDB cookbook. Birmingham: Packt Publishing.

- Biemann, C. & Mehler, A. (Eds.). (2014). *Text mining: From ontology learning to automated text processing applications: Festschrift in honor of Gerhard Heyer*. Heidelberg: Springer.
- Canavan, T. (2011). CMS security handbook: The comprehensive guide for WordPress, Joomla, Drupal, and Plone. Indianapolis, IN: Wiley.
- Derr, M. & Symes, T. (2011). *Joomla: Visual quickstart guide* (2nd ed.). Berkeley, CA: Peachpit Press.
- Engard, N.C. (2010). Practical open source software for libraries. Oxford: Chandos.
- Fitzgerald, B. et al. (2011). Adopting open source software: A practical guide. Cambridge, Mass.: MIT Press.
- Horridge, M. (2011). A practical guide to building OWL ontologies using Protégé 4 and CO-ODE tools (1.3ed.). Manchester: University of Manchester.
- Hillar, S.P. (2012). Mind mapping with FreeMind: Easy recipes to increase productivity and creativity using powerful free tools—FreeMind and Freeplane. Mumbai: Packt Publishing.

- Karambelkar, H. (2013). Scaling Big Data with Hadoop and Solr: Learn exciting new ways to build efficient, high performance enterprise search repositories for Big Data using Hadoop and Solr. Mumbai: Packt Publishing.
- Kumar, J. (2015). Apache Solr search patterns: Leverage the power of Apache Solr to power up your business by navigating your users to their data quickly and efficiently. Mumbai: Packt Publishing.
- Laliwala, Z. & Shaikh, A. (2013). Web crawling and data mining with Apache Nutch: Perform web crawling and apply data mining in your application. Mumbai: Packt Publishing.
- Library and Information Technology Association. (2002). *Major open source web finding tools and digital library systems for librarians*. Palm Desert, CA: American Library Association.
- Maimon, O. & Rokach, L. (Eds.). *Data mining and knowledge discovery handbook* (2nd ed.). New York: Springer.
- Moon, B.M. et al. (2011). *Applied concept mapping: Capturing, analyzing, and organizing knowledge*. Boca Raton: CRC Press.
- Okada, A., Shum, S.J.B. & Sherborne, T. (Eds.). (2014). *Knowledge cartography: Software tools and mapping techniques*. London: Springer.
- Papy, F. (2016). Digital libraries: Interoperability and uses. London: ISTE Press.
- Robertson, J. G. & Fitzgerald, B. (2013). *Drupal for Education and E-Learning: Create web-based, content-rich tools for teaching and learning* (2nd ed.). Mumbai: Packt Publishing.
- Tiggeler, E. (2013). *Joomla! 3 Beginner's Guide: A clear, hands-on guide to creating perfect content managed websites with the free Joomla! CMS.* Mumbai: Packt Publishing.

1st Year 2nd Semester

Paper Code: MPLIS-05

Paper Name: PHILOSOPHY OF LIBRARY & INFORMATION SCIENCE

- Philosophy of Information Studies
- Library and information science- practice, theory, and philosophical basis
- LIS and Philosophy of science
- Metaphysics, Logic and Philosophy of Information
- Empiricism, rationalism and positivism in library and information science
- Phenomenology and information Studies
- LIS and Hermeneutics
- Structuralism, post-structuralism in library and information science
- Critical realism as a philosophy and social theory in information science
- Epistemology and Information
- Ethics and Information

- Bates, M. J. (2005). An introduction to metatheories, theories, and models. In K. E. Fisher, S. Erdelez, & L. McKechnie (Eds.), *Theories of information behavior* (pp. 1–24). Medford, NJ: Information Today.
- Bates, M. J. (2006). Fundamental forms of information. *Journal of the American Society for Information Science and Technology*, 57(8), 1033–1045.
- Blair, D. C. (2003). Information retrieval and the philosophy of language. *Annual Review of Information Science and Technology*, *37*, 3–50.
- Blair, D. C. (2006). *Wittgenstein, language, and information: "Back to the rough ground!"* Dordrecht, The Netherlands: Springer.
- Brookes, B. C. (1980). The foundations of information science, Part I: Philosophical aspects. *Journal of Information Science*, 2(3/4), 125–133.
- Budd, J. M. (1995). An epistemological foundation for library and information science. *Library Quarterly*, 65(3), 295–318.
- Budd, J. M. (2001). *Knowledge and knowing in library and information science: A philosophical framework*. Lanham, MD: Scarecrow.

- Budd, J. M. (2005). Phenomenology and information studies. *Journal of Documentation*, 61(1), 44–59.
- Cornelius, I. V. (1996). *Meaning and method in information studies*. Norwood, NJ: Ablex. Day, R. E. (2005). Poststructuralism and information studies. *Annual Review of Information Science and Technology*, *39*, 575–609.
- Fallis, D. (2006). Social epistemology and information science. *Annual Review of Information Science and Technology*, 40, 475–519.
- Floridi, L. (2002a). On defining library and information science as applied philosophy of information. *Social Epistemology*, *16*(1), 37–49.
- Floridi, L. (2011). The Philosophy of Information. Oxford: Oxford University Press.
- Foucault, M. (1972). The Archaeology of Knowledge. New York: Pantheon.
- Furner, J. (2010). Philosophy and information studies. *Annual Review of Information Science and Technology*. 44, 161–200.
- Hansson, J. (2005). Hermeneutics as a bridge between the modern and the postmodern in library and information science. *Journal of Documentation*, 61(1), 102–113.
- Hjørland, B. (2000). Library and information science: Practice, theory and philosophical basis. *Information Processing & Management*, *36*(3), 501–531.
- Hjørland, B. (2005). Empiricism, rationalism and positivism in library and information science. *Journal of Documentation*, 61(1), 130–155.
- Moran, D. (Ed.). (2008a). *The Routledge companion to twentieth century philosophy*. London: Routledge.
- Popper, K.R. (1979), *Objective knowledge: an evolutionary approach (revised edition)*. Oxford: Clarendon Press
- Shera, J. H. (1970). *Sociological foundations of librarianship*. New York: Asia Publishing House.
- Smith, M. M. (1997). Information ethics. *Annual Review of Information Science and Technology*, 32, 339–366.
- Talja, S., Tuominen, K., & Savolainen, R. (2005). "Isms" in information science: constructivism, collectivism and constructionism. *Journal of Documentation*, 61(1), 79–101.

Vakkari, P., & Cronin, B. (Eds.). (1992). Conceptions of library and information science: Historical, empirical and theoretical perspectives. London: Taylor Graham.

Zimmermann, J. (2015). *Hermeneutics: a Very Short Introduction*. Oxford: Oxford University Press.

Paper Code: MPLIS-06

Paper Name: RANGANATHAN STUDY

This course will introduce students to the contributions of Dr. S.R. Ranganathan in the field of Library & Information Science. It will also study Ranganathan's life and career at the backdrop of social movement in India. The course will identify the relevance of his ideas in the context of digital world.

- Dr. S. R. Ranganathan Childhood, education & early life
- Ranganathan as librarian
- Ranganathan's contribution on library classification, cataloguing, indexing, reference services and documentation
- Ranganathan's contribution on the theory and practice of library management
- Ranganathan and library movement in India
- Ranganathan and philosophy of library science
- Ranganathan as teacher
- Influence of Indian philosophy & religion on Ranganathan
- Ranganathan as author. Literary criticism of his writings
- Relevance of Ranganathan's ideas in digital world

- Carr, P.L. (2014). Reimagining the library as a technology: An analysis of Ranganathan's Five Laws of Library Science within the social construction of technology framework. *Library Quarterly*, 84(2), 152–164.
- Das Gupta, A.K. (1965). Essay in personal bibliography: Ranganathan Festschrift, Volume 2: Bibliography of writings on and by Dr. S.R. Ranganatha. Bombay: Asia Publiching House.
- Dudley, E. (Ed.). (1992). S.R. Ranganathan, 1892-1972. New Delhi: Ess Ess.
- Girja Kumar. (1992). *S.R. Ranganathan: an intellectual biography*. New Delhi: Har-Anand Publications.
- Kaula, P.N.(*Ed*). (1965). *Library science today: Ranganathan Festschrift*, Volume 1: Paper contributed on 71st Birthday of Dr. S.R. Ranganathan (12 August 1962). Bombay: Asia Publishing House.
- Glassmeyer, S. (2010). Ranganathan 2.0. AALL Spectrum, 14(3), 22–24.
- Goldup, S.J. (2010). Public libraries in the digital age: Investing the implementation of Ranganathan's Five Laws of library science in physical and online library services. School of Information Management, Victoria University of Wellington.
- Gorman, M. (1995). Five new laws of librarianship. American Libraries, 26(8): 784–785.
- Noruzi, A. (2004). Application of Ranganathan's laws to the Web. *Webology*, 1(2). Retrieved from: http://www.webology.org/2004/v1n2/a8.html.
- Ranganathan, S R. (1959). *Library Administration*. Bangalore: Sarada Ranganathan Endowment for Library Science.
- Ranganathan, S.R. (1966). Elements of library classification (2nd ed.). Bombay: UBS.
- Ranganathan, S.R. (1967). *Prolegomena to library classification* (3rd ed.). Bombay: UBS.
- Ranganathan, S. R. (1987). *Colon Classification* (7th ed.). Banglore: Sarada Ranganathan Endowment for Library Science.
- Ranganathan, S. R. (1988). Classified Catalogue Code with additional rules for dictionary catalogue. Bangalore: Sarada Ranganathan Endowment for Library Science.
- Ranganathan, S. R.(1988). *The Five Laws of Library Science*. New Delhi: Sarada Ranganathan Endowment for Library Science.

Ranganathan, S R. (1989). *Library book selection*. Bangalore: Sarada Rangnathan Endowment for Library Science.

Ranganathan, S. R. (1991). Reference service. Bangalore: Sarada Ranganathan Endowment

Ranganathan, S. R. (2006). *Philosophy of library classification*. Bangalore: Ess Ess.

Satija, M.P. (1992). S.R. Ranganathan and the method of science. New Delhi: Aditya Prakashan.

Sewa Singh. (1995). S.R. Ranganathan: Birth centenary literature. New Delhi: Ess Ess.

Walter, S. (2012). Ranganathan redux: The "Five Laws" and the future of college and research libraries. *College and Research Libraries*, 73(3), 213–215.

Paper Code: MPLIS-07

Paper Name: DIGITAL INFORMATION SOURCES IN LIS RESEARCH

The course will identify various digital information sources required for LIS research. The students will learn to handle and use these sources. Some of the sources are enlisted below. Necessary other sources to be added.

- EBSCO
- Emeraldinsight
- Google Books
- Google Scholar
- Internet Public Library
- LISA
- MEDLINE
- NDLTD.
- OATD
- OpenDOAR
- Project Muse
- PROQUEST
- PubMed
- Sciencedirect
- SCOPUS
- Springernet
- Web of Science

- Aversa, E. S. and Blazek, R. (1994) *The humanities: A selective guide to information sources*. Englewood, CO: Libraries Unlimited.
- Buttlar, L. (1999). Information sources in library and information science doctoral research. *Library & Information Science Research*, 21(2),227-245.
- Devine, J. and Egger-Sider, F. (2009). *Going beyond Google: The Invisible Web in learning and teaching*. New York: Neal-Schuman.
- Dubnjakovic, A. & Tomlin, P. (2010). A practical guide to electronic resources in the humanities. Oxford: Chandos.
- Mann, T. (2005). *The Oxford guide to library research* (3rd ed.). Oxford: Oxford University Press.
- Miller, W. (ed) *Academic research on the Internet: Options for scholars and libraries*. New York: Haworth Information Press.
- Sherman, C. & Price, G. (2001). *The Invisible Web: Uncovering information sources search engines can't see.* Medford, N. J.: Information Today.
- Weiss, A. (2014). *Using massive digital libraries : A LITA guide*. Chicago: American Library Association.
- Whitlatch, J.B. & Searing, S.E. (Eds.). (2014). *Guide to reference: Essential general reference and library science sources*. Chicago: American Library Association.

2nd Year 1st Semester & 2nd Semester

Paper Code: MPLIS-08

Paper Name: DISSERTATION

After the successful completion of the M.Phil. Qualifying Examination, candidates will be required to submit a thesis of roughly 20,000-30,000 words on any specialized area of their choice, under the supervision of a teacher appointed by the BOS of the Department.