VIDYASAGAR UNIVERSITY
Midnapore-721102

Syllabus for Ph. D. Couse Work in Library and Information Science

[w. e. f. 2021-22 session]

Structure of Ph.D. Course Work Syllabus in Library and Information Science

Course Code	Course Name	Marks
LIS-111	Research Methodology and Research Publication Ethics (RPE) and Computer Application	50
LIS-112	Recent Developments in Library and Information Science	50
LIS-113	Research in Library and Information Science-Sources and Tools	50
LIS-114	Emerging Issues in Core Areas of Research	50

Course Name: Research Methodology and Research Publication Ethics (RPE) and Computer Application

Course Code: LIS-111

Full marks: 50

(Theory)

SECTION-A

Basic concepts of Research Methodology **10 Marks**

- Definition of Research Methodology- Distinction between Method and Methodology- Different types of Research- Basic and Applied research, Descriptive, Experimental and Analytical research, Quantitative and Qualitative research, Conceptual research
- Research question and its framing
- Research design and methods
- Literature search- Print, Non-Print and digital resources.
- Literature review-What, Why and How?
- Primary data: sources and methods of collection
- Secondary data: sources and methods of collection
- Data presentation-tabulation, graphical presentation, use of statistical packages
- Research reporting: structure, style, contents, guidelines, quality parameters and citation
- Library and Information Science research, Impact of new technologies; e-citation, on-line survey, Webliography, Organizations, Institutions, Experts.

Quantitative Techniques **10 Marks**

- Statistical methods - Introduction
- Measures of Variability and skewness
- Sampling & sample designs
- Correlation studies and regression analysis
- Hypothesis testing, Null and Alternative Hypothesis
- Analysis of Variance and Co-variance, 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

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19. Moore, N. (2006). *How to do research* (3rd ed.). London: Facet Publishing.
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SECTION B

Research and Publication Ethics **20 Marks**

RPE 01: PHILOSOPHY AND ETHICS (3 hrs.)

1. Introduction to philosophy: definition, nature and scope, concept, branches
2. Ethics: definition, moral philosophy, nature of moral judgements and reactions, different branches of ethics, research ethics.
3. Responsibilities of researchers to fellow researchers, respondents, the public and the academic community.

- **RPE 02: SCIENTIFIC CONDUCT (5 hrs.)**

1. Ethics with respect to science and research
2. Intellectual honesty and research integrity
3. Scientific misconducts: Falsification, Fabrication, and Plagiarism (FFP)
4. Redundant publications: duplicate and overlapping publications, salami slicing
5. Selective reporting and misrepresentation of data
6. Privacy, autonomy, confidentiality and anonymity
7. The funding and sponsorship of research.

- **RPE 03: PUBLICATION ETHICS (7 hrs.)**

1. Publication ethics: definition, introduction and importance
2. Best practices / standards setting initiatives and guidelines: COPE (Committee of Publication Ethics), WAME (World Association of Medical Editors), etc.
3. Conflicts of interest
4. Publication misconduct: definition, concept, problems that lead to unethical behaviorand vice versa, types
5. Violation of publication ethics, authorship and contributorship
6. Identification of publication misconduct, complaints and appeals
7. Predatory publishers and journals
8. The role of the researchers.

PRACTICE

RPE 04: OPEN ACCESS PUBLISHING (4 hrs.)

1. Open access publications and initiatives
2. SHERPA (Securing a Hybrid Environment for Research Preservation and Access) /RoMEO (Rights Metadata for Open Archiving) online resource to

check publisher copyright & self-archivingpolicies

3. Software tool to identify predatory publications developed by SPPU (Sabitribai Phula Pune University)
4. Journal finder/ journal suggestion tools viz. JANE, Elsevier Journal Finder, SpringerJournal Suggester etc.

- **RPE 05: PUBLICATION MISCONDUCT (4hrs.)**

A. Group Discussions (2 hrs.)

1. Subject specific ethical issues, FFP, authorship
2. Conflicts of interest
3. Complaints and appeals: examples and fraud from India and abroad

B. Software tools (2 hrs.)

Use of plagiarism software like Turnitin, Urkund and other open-source software tools

- **RPE 06: DATABASES AND RESEARCH METRICS (7hrs.)**

A. Databases (4 hrs.)

1. Indexing databases
2. Citation databases: Web of Science, Scopus, etc.

B. Research Metrics (3 hrs.)

1. Impact Factor of journal as per Journal Citation Report, SNIP, SJR, IPP, CiteScore
2. Metrics: h-index, g index, ilO index, altmetrics

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- Indian National Science Academy (INSA), Ethics in Science Education, Research and Govemance(2019) , ISBN:978-81-939482-l- 7. https://www.insaindia.res.in/pdf/Ethics Book.pdf
- Oliver Paul: *The Students Huide to Research Ethics*, Open University Press, McGrew Hill

- H. Martyn and Anne Trainanou: *Ethics in Qualitative Research: Controversies and Contexts*, Sage, New Delhi.

SECTION-C

Basic knowledge of Computer Application **Marks 10**

1. MS Word
2. Power Point Presentation
3. Spread Sheet / Excel Sheet
4. Internet

Course Name: Recent Developments in Library and Information Science

Course Code: LIS-112

Full marks: 50

(Theory)

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

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Course Name: Research in Library and Information Science-Sources and Tools

Course Code: LIS-113

Full marks: 50

(Theory)

- Digital Information Sources and Services: Nature, Features and Types;
- Internet-based Services; Databases: Bibliographic and Full Text;
- Digital Library and Institutional Repositories;
- Virtual Reference Tools and Services;
- Open Access in LIS, Open Data in LIS, Green and Gold LIS, Evaluation of Digital Information Sources and Services
- Web 2.0 and Library 2.0: Tools, sources and services,
- Information mashup in LIS research, Collaborative research support tools
- Online survey tools: Use and deployment
- LIS Research: Electronic Theses and Dissertations on LIS database (NDLTD, LDL, VidyaNidhi, Theses.com)
- Proquest Open, Open Access ETD (oatd.org) etc.), Citation Tools (e.g. CiteSeer), Virtual Union Catalogue

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2. Casey, M. E. & Savastinuk, L. C.: Library 2.0: Service for the next-generation library. *Library Journal,* 26.Available at http://www.libraryjournal.com/article/CA6365200.html
3. Directory of Open Access Journals (DOAJ): http://www.doaj.org
4. FAO & UNESCO: *Digitization and digital libraries module (in CDROM)*. Rome: FAO, 2005.
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6. Lenhart, A., Fallows, D., & Horrigan, J.: *Content Creation Online: 44% of U.S. Internet users have contributed their thoughts and their files to the online world.* Available at http://www.pewinternet.org/pdfs/PIP_Content_Creation_Report.pdf
7. LIS Core Cluster: http://www.db.dk/

8. LISWiki. Web site: http://liswiki.org/wiki/
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14. Wellman, B., & Haythornthwaite, C. eds.: *The Internet in everyday life*. Malden, MA: Blackwell, 2002.

Course Name: Emerging Issues in Core Areas of Research

Course Code: LIS-114

Full marks: 50

- AI-driven Information-Processing applications
- Data-Carpentry tools
- Bibliometrics Laws and Mathematical Foundations of Bibliometrics/ Scientometrics/ Informetrics
- Bibliometrics Tools and Techniques such as Sci2,VOSviewer, Bibexcel, Citespace, PoP, SITKIS, R-Studio etc.
- Reference Management Tools like Zotero, Mendeley etc.
- Various applications of OpenRefine
- Advanced Bibliometric Methods for Evaluation, Ranking and Indicator Mapping for Research

N.B. Researchers are supposed to submit the review of existing literatures in their own areas of research.