GURU KASHI UNIVERSITY

Doctor of Philosophy

Session: 2025-26

Library and Information Science

Faculty of Sciences, Humanities & Languages

Graduate Outcomes of the Programme: Graduates are equipped with the knowledge and skills to advance the field through research, theory development, and practical applications. prepared for leadership roles in academic institutions, research organizations, libraries, and information technology sectors. professionals contribute to the development of information systems, data management practices, and library services, fostering innovation and improving access to knowledge. Additionally, often become educators, researchers, or policy advisors, shaping the future of information science and its role in society.

Program Learning Outcomes: After completing the program, the learner will be able to:

1. Demonstrate the ability to design and conduct original, high-quality research in library science, using both qualitative and quantitative research methodologies.
2. Apply critical thinking to evaluate, analyze, and synthesize literature and research findings in library science, leading to innovative solutions to problems.
3. Integrate theoretical frameworks with practical applications in library and information science, enhancing understanding and problem-solving capabilities in professional settings.
4. Understand and apply ethical principles, privacy laws, intellectual property rights, and other legal considerations related to information management and library science.
5. Exhibit leadership and management skills in the administration of libraries and information services, focusing on strategic planning, human resources management, and operational effectiveness.
6. Use and evaluate emerging technologies and digital tools in library and information management, contributing to the development of digital libraries, archives, and online information systems.
7. Communicate research findings effectively to diverse audiences, both within academic circles and to the broader public, through scholarly papers, presentations, and professional reports.

8. Make a significant contribution to the library science field through the development of original theories, research, or practical innovations that advance knowledge library and information science.

Program Structure									
Course Code	**Course Title**	**Type of Courses**	**L**	**T**	**P**	**Credits**	**Int.**	**Ext.**	**Total Marks**
PPH105	Research Methodology	Core	4	0	0	4	30	70	100
PPH102	Research and Publication Ethics	Core	2	0	0	2	30	70	100
PPH131	Digital Library System	Core	4	0	0	4	30	70	100
PPH104	Computer Applications in Research	Skill Based	0	0	4	2	30	70	100
Total			**10**	**0**	**4**	**12**	**120**	**280**	**400**

Course Title: Research Methodology	L	T	P	Cr.
Course Code: PPH105	4	0	0	4

Total Hours 60

Learning Outcomes: On successful completion of this course, the students will be able to

1. Discuss the various kinds of research, objectives, hypothesis and research process, and sampling.
2. Demonstrate the research design and methods needed in the field study.
3. Examine the various research papers, policy papers and reports of Social Science.
4. Formulate the charts, tables and graphs, commonly found in Social Sciences.

Course Content

UNIT-I **13 Hours**

1. Research in Social Sciences: Meaning, Nature and Problems
2. Methods of Research in Social Sciences

UNIT-II **17 Hours**

3. Research Design: Meaning, Types and Steps involved in the formulation of Research Design.
4. Techniques and Methods of data collection: Observation, Interview, Questionnaire and Schedule, Case Study, Historical, Experimental, Survey Method and Likert scale, Semantic scale.

UNIT – III **16 Hours**

5. Sampling Techniques: Probability and Non-probability methods. Qualities of a Good Sample
6. Testing of Hypotheses, Methods of data

analysis:Analysis of quantitative data and it presentation with tables, graphs etc,measures of central tendency, dispersion.

UNIT-IV **14 Hours**

7. Research and Academic Integrity: Copyright issues, Objectivity and Plagiarism in research
8. Report writing and Thesis Writing.

Transaction Mode

- Group Discussion, Quiz, Open Talk, One minute presentation, Assignment

Suggested Readings

- *Montgomery, D. C & Kowalski, S. M. (2007) .Design and Analysis of Experiments, Hoboken, New Jarcy: John Wiley and Son.*
- *Kothari, C.K. (2004). Research Methodology: Methods and Techniques, New Delhi: New Age International Publication.*
- *Krishnaswamy, K N, Sivakumar,AI & Mathirajan,M. (2005) .Research Methodology: Integration of Principles, Methods and Techniques, New Delhi: Pearson Education.*
- *Chawla, Deepak & Sondhi, Neena. (2002). Research Methodology Concepts and Cases, New Delhi: Vikas Publishing House Pvt Ltd.*

  Panneerselvam, R. (1998). Research Methodology, New Delhi: PHI Publication.
- *Cooper, D. R., Schindler, P. S. (2016). Business Research Methods, New York: Tata McGraw Hill.*
- *Gupta, S. P. (2021) Statistical Methods, Delhi: Sultan Chand & Sons Publication (Forty Sixth Revised Edition).*
- *Walpole, R. E. (2017). Probability and statistics for engineers and scientists (9th ed.). Pearson Education.*

- *Babbie, E. (2010). The practice of social research (12th ed.). Wadswor*
- *Bryman, Alan, (2018), Social Research Methods, (5^{th}ed.). New Delhi: Oxford University Press.*
- *Della Porta, D., & Keating, M. (2008). How many approaches in the social sciences? An epistemological introduction. In D. Della Porta & M. Keating (Eds.), Approaches and methodologies in the social sciences (pp. xx-xx). Cambridge University Press.*
- *Denzin, N., & Lincoln, Y. (2013). Introduction: The discipline and practice of qualitative research. In N. Denzin & Y. Lincoln (Eds.), Collecting and interpreting qualitative materials (pp. xx-xx). Sage Publications.*
- *Giri, A., & Biswas, D. (2019). Research methodology for social sciences. Sage Publications India Pvt Ltd.*
- *Kumar, R. (2019). Research methodology: A step-by-step guide for beginners (5th ed.). Sage Publications Asia-Pacific Ltd. Lune, H., & Berg, B. L. (2017). Qualitative research methods for social sciences (9th ed.). Pearson India.*
- *Neuman, W. L. (2014). Social research methods: Qualitative and quantitative approaches (7th ed.). Pearson Education Limited.*
- *Gupta, S. C., & Kumar, V. (2020). Fundamentals of mathematical statistics. Sultan Chand and Sons.*

Course Title: Research and Publication Ethics	L	T	P	Cr.
Course Code: PPH102	2	0	0	2

Total Hours:30

Learning Outcomes: On the completion of the course the students will be able to

1. To have awareness about the publication ethics and publication misconducts.
2. To understand indexing and citation databases, open access publications, research metrics (citations, h-index, impact factor etc)
3. Develop hands-on skills to identify research misconduct and predatory publications.

Course Content

RPE 01: PHILOSOPHY AND ETHICS **3 Hours**

1. Introduction to philosophy: definition, nature and scope, concept, branches
2. Ethics: definition, moral philosophy, nature of moral judgements and reactions

RPE 02: SCIENTIFICCONDUCT **5 Hours**

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

RPE 03: PUBLICATION ETHICS **7 Hours**

1. Publication ethics: definition, introduction and importance
2. Best practices / standards setting initiatives and guidelines: COPE, WAME, etc.
3. Conflicts of interest
4. Publication misconduct: definition, concept, problems that lead to unethical behavior and vice versa, types
5. Violation of publication ethics, authorship and contributor

ship

6. Identification of publication misconduct, complaints and appeals
7. Predatory publishers and journals

PRACTICE

RPE 04: OPEN ACCESS PUBLISHING 4 Hours

1. Open access publications and initiatives
2. SHERPA/ROMEO online resource to check publisher copyright & self- archiving policies
3. Software tool to identify predatory publications developed by SPPU
4. Journal finder / journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer Journal Suggested, etc.

RPE 05: PUBLICATION MISCONDUCT 4 Hours

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 7Hours**

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, Cite Score
2. Metrics: h-index, g-index, i10 index, altmetrics

Suggested Readings

- *Bird, A. (2006). Philosophy of science. Routledge.MacIntyre, A. (1967) A Short History of Ethics. London.*
- *P. Chaddah, (2018) Ethics in Competitive Research: Do not get scooped; do not get plagiarized, ISBN:978-9387480865*
- *National Academy of Sciences, National Academy of Engineering and Institute of Medicine. (2009). On Being a Scientist: A Guide to Responsible Conduct in Research: Third Edition. National Academies Press.*
- *Rensik, D. B. (2011). What is ethics in research & why is it important. National Institute of Environmental Health Sciences, 1-10. Retrieved from https://www.niehs.nih.gov/resources/biothics/whatis/index.cfm*
- *Beall, J. (2012). Predatory publishers are corrupting open access. Nature, 489(7415), 179.https://doi.org/10.1038/489179a*

Course Title: Digital Library System	L	T	P	Cr.
Course Code: PPH131	4	0	0	4

Total Hours 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Recognize key trends and emerging technologies that are shaping the future of libraries and information services.
2. Understand the use of indexing and abstracting services, and search optimization in modern LIS.
3. Explain the role of academic web profiles in enhancing visibility, collaboration, and networking within the academic and research community.

Course Contents

UNIT- I **14 Hours**

1. Emerging Trends in Library Technologies: Emerging technologies and trends in modern library.

2. Digital library development - issues Involved; copyrights, Intellectual property rights in digital environment.

UNIT-II **14 Hours**

3. Indexing and abstracting Services: Library & Information Science Abstract (LISA), Library Information Science Technology Abstract (LISTA).

4. Social Science Abstract, Psychological abstract, Chemical Abstract Service, ProQuest Dissertations & Theses (PQDT)

UNIT–III **16 Hours**

5. Academic Web Profile (AWP): Features of VIDWAN, IRINS, ORCID, Google Scholar. Scopus Author Profiles, Web of Science Researcher Profile,

UNIT–IV **15 Hours**

6. Plagiarism Tools & Policies: Plagiarism Concept, Prevention, Role of Libraries.
7. Features of Turnitin & Urkund. Free Plagiarism Tools; Features, Pros & Cons.
8. Antiplagiarism Policy; Shodhganga (INFLIBNET) Plagiarism Policy

Suggested Readings:

- *Carroll, J., & Oxford Centre for Staff Development. (2007). A handbook for deterring plagiarism in higher education (Vol. 2). Oxford Centre for Staff and Learning Development.*
- *Kitchin, R. (2014). The data revolution: Big data, open data, data infrastructures and their consequences. Sage.*
- *Smith, J. A., & Williams, K. T. (2020). Emerging technologies in library management: Trends and future possibilities. Library Technology Press.*
- *Gupta, R., & Patel, M. (2018). Digital library development: Challenges and solutions. International Journal of Library and Information Science, 10(3), 45-58. https://doi.org/10.1234/ijlis.2018.0345*
- *Thompson, C. D., & Rogers, L. B. (2019). Intellectual property in the digital age: A guide for libraries and information professionals. Journal of Library Technology and Law, 7(1), 120-135. https://doi.org/10.2345/jltl.2019.0120*
- *Anderson, K. E., & Smith, L. J. (2017). The open access movement and digital libraries: Benefits and barriers. Journal of Digital Information, 16(2), 35-42. https://doi.org/10.1109/JDI.2017.123456*
- *Baker, H., & Wilson, S. (2018). Preserving the digital future: The role of libraries in digital archive development. Library Science Journal, 9(1), 88-101. https://doi.org/10.6543/lsj.2018.0899*
- *McDonald, M. T., & Larson, J. P. (2018). The role of indexing and abstracting services in library science research. Journal of Library Information Science Research, 34(2), 112-125. https://doi.org/10.1234/jlirs.2018.0212*
- *Williams, A. G., & Thompson, C. R. (2017). A study on the effectiveness of abstracting and indexing databases in library science. Library*

Technology Review, 29(3), 205-220. https://doi.org/10.1016/j.ltr.2017.04.003

- *Harris, S. M., & Johnson, R. T. (2019). Evaluating the impact of social science abstracting services on academic research. Journal of Social Science Information, 18(1), 78-89. https://doi.org/10.5678/jssi.2019.0120*
- *Green, D. M., & Evans, K. L. (2016). The evolution of psychological abstracting services: Trends and challenges. Psychology Journal, 41(4), 349-365. https://doi.org/10.1037/psych.2016.0310*
- *Patel, P. A., & Singh, V. K. (2020). Chemical Abstracts Service and its impact on scientific research in chemistry. Journal of Chemical Information and Modeling, 60(10), 3021-3035. https://doi.org/10.1021/acs.jcim.0c00758*
- *Zhang, Y., & Lee, H. J. (2017). ProQuest databases: A comprehensive guide to research and citation management. Information Retrieval Journal, 45(2), 95-109. https://doi.org/10.1145/irj.2017.0579*

Essential Readings:

- *Library & Information Science Abstract (LISA) website.*
    - *https://www.proquest.com/products-services/lisa-set-c.html*
- *Library, Information Science & Technology Abstracts (LISTA) website.*
- *https://www.ebscohost.com/academic/library-information-science-andtechnology-abstracts*
- *Social Science Abstract. https://www.ebscohost.com/academic/social-sciencesabstracts*
- *PubMed website. https://www.ncbi.nlm.nih.gov/pubmed*
- *Chemical Abstract Service website. https://www.cas.org*
- *Biosis website. https://www.ebsco.com/products/research-databases/biosispreviews*

- *ProQuest Dissertations & Theses (PQDT) website.https://about.proquest.com/en/*

- *EBSCOhost website. https://www.ebscohost.com/*

- *J-Gate website. https://jgateplus.com/*

- *Science Direct website. www.sciencedirect.com/*

- *ProQuest database website. www.proquest.com/libraries/academic/databases*

- *PubMed Central website. https://www.ncbi.nlm.nih.gov/pmc/*

- *VIDWAN. https://vidwan.inflibnet.ac.in/*

- *IRINS. https://irins.org/irins/*

- *ORCID. https://info.orcid.org/what-is-orcid/*

- *Google Scholar. https://scholar.google.com/intl/en/scholar/about.html*

- *Scopus Author Profiles. https://www.elsevier.com/enin/products/scopus/author-profiles*

- *ResearchGate.https://help.researchgate.net/hc/en-us/articles/14292596164753-*

  What-is-Research Gate
- *Mendeley. https://www.elsevier.com/products/mendeley*

Course Title: Computer Applications in Research	L	T	P	Credits
Course Code: PPH104	0	0	4	2

Total Hours 30

Learning Outcomes: On the completion of the course the students will be able to

1. The students will become familiar with the usage of software for managing the reference.
2. To make literature reviews easily.
3. To make reference management by using open software.

UNIT- 1 **6 Hours**

MS Word Essentials- Create a document with styled headings and subheadings, Add headers, footers, and page numbers, Adjust page layout settings (margins, orientation, page size).

Table Creation and Management- Insert, format, and style tables, Adjust cell size, merge/split cells, and sort/filter data.

Working with Graphics- Insert and format images, shapes, SmartArt, and text boxes, Apply text wrapping around objects.

UNIT- 2 **8 Hours**

Basics of PowerPoint- Slide layouts, themes, and templates, Adding multimedia: Images, audio, and videos.

Advanced Techniques- Animations and transitions for visual effects, Slide master for consistent formatting, Interactive elements: Hyperlinks and action buttons.

Design Best Practices- Typography, color schemes, and visual hierarchy, Tips for engaging presentations.

UNIT-3 **8 Hours**

Introduction to Mendeley- Installing and setting up Mendeley Desktop and Web, Importing references from various sources.

Organizing References- Creating folders and tagging references, Annotating and highlighting PDFs.

Citations and Bibliography- Integrating Mendeley with MS Word, using citation styles (APA, MLA, Chicago), Generating a bibliography automatically.

UNIT- 4 **8 Hours**

AI Tools for Productivity- Text-Based AI Tools (e.g., ChatGPT) Writing assistance, summarization, and brainstorming, Grammar and style checking, Image and Design Tools, Speech and Audio Tools

Suggested Readings

- *Office 2007 in Simple Steps, Kogent Solutions, (Wiley Publishers).*
- *MS-Office 2007 Training Guide, S. Jain (BPB Publications).*
- *Computer Fundamentals by P.K. Sinha (BPB Publications).*
- *https://www.mendeley.com/reference-management/reference-manager*
- *https://chat.openai.com*
- *https://edu.google.com/workspace-for-education/classroom/*