GURU KASHI UNIVERSITY

Doctor of Philosophy

Session: 2024-25

Faculty of Law
Faculty of Arts & Social Sciences
Department of Library Science
Faculty of Visual &Performing Arts
Faculty of Physical Education
Faculty of Management and Commerce

IQAC

Program Structure						
Course Code	**Course Title**	**Type of Course**	**L**	**T**	**P**	**Total Credits**
PPH105	Research Methodology	Core	4	0	0	4
PPH102	Research and Publication Ethics	Core	2	0	0	2
PPH103	Proficiency in Teaching	Core	3	0	2	4
PPH104	Computer Applications in Research	Skill Based	1	0	2	2
Total Numbers of Credits						12

Course Title: Research Methodology

L	T	P	Credits
4	0	0	4

Course Code: PPH105

Course Learning Outcomes **Total Hours: 60**

After completion of the course the research scholar will be able to;

- Explore the different approaches to Research
- Review the related literature
- Select appropriate sampling design for different types of research study
- Construct tools for different types of research
- Document and disseminate research findings in education
- Develop competence of analysis through various statistical measures

Course Content

Unit-I **Hours 13**

1. Research in Social Sciences: Meaning, Nature and Problems.
2. Research approaches: Logical positivism, Constructivism
3. Quantitative and qualitative types of research: their applications according to purpose and method
4. Descriptive Research: Assessment studies, evaluation studies, ex-post facto studies, replication and meta-analysis.
5. Experimental research: Developing different Types of experimental research designs. Internal validity and external validity of research

Unit-II **Hours 17**

1. Process to select a problem, Formulating research questions, Hypotheses and review of related literature.
2. Sampling design: Selecting appropriate probability and non-probability sampling techniques for qualitative and quantitative research problems.

Unit- III **Hours 16**

1. Quantitative research methods and tools: Selection, types and application Qualitative research

methods and tools: Selection, types and application
2. Mixed Method: Meaning and characteristics, designs and their application
3. Triangulation in research: Meaning, designs and their application

Unit-IV **Hours 14**

1. Quantitative Data Analysis: t-test, F-test, chi square test, ANOVA, correlation, factor analysis, regression and prediction
2. Qualitative Data Analysis: Data Reduction, Data Display and Reaching at Conclusions, Content analysis
3. Research and Academic Integrity: Copyright issues, Objectivity and Plagiarism in research
4. Report writing and Thesis Writing.

Transaction Mode

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

Suggested Readings

Adams, K. A., & Lawrence, E. K. (2015). Research methods, statistics and applications. Sage Publications

Agarwal, Y. P. (2004). Statistical Methods: Concepts, Application and Computation. New Delhi: Sterling Publishers.

Aiken, L.R., &Marnat, G. G. (2009). Psychological testing and assessment. Noida (U.P.): Pearson.

Anastasi, A., & Urbina, S. (2014). Psychological testing. New Delhi: PHI Learning Private Limited.

Best J.W. (1999). Research in Education. New Delhi: Prentice Hall of India Pvt. Ltd.

Best, J.W., & Kahn, J. W. (2006). Research in education. New Delhi: PHI Learning Private Ltd.

Bogdon, R., &Biklen, S. K. (2008). Qualitative Research for Education: An Introduction to Theories and Practice. New Delhi: PHI learning

Borg, W.R., & Gall, M.D. (1983). Educational Research – An Introduction. New York: Longman, Inc.

Check, J., &Jurs, S. G. (2009). Research methods in education. Pearson Publications. Page 5 of 16

Creswell, J. W. (2015). Educational Research: Planning, Conducting and Evaluating Quantitative and qualitative Research. Boston: Pearson Publications.

Curtis, W., Murphy, M., &Shields, S. (2013). Research and Education. New York & London: Routledge

EfratEfron, S., &Ravid, R. (2013). Action Research in Education: A Practical Guide, New York: Routledge • Egbert, J., &Sanden, S. (2013). Foundations of Education Research: Understanding Theoretical Components. New York: Routledge.

Fraenkel, J.R., &Wallen, N.E. (1996). How to Design and Evaluate Research in Education. New York: McGraw Hill.

Gall, M. D., Gall, J. P., & Berg, W. R. (2007). Educational research an introduction. Pearson Publications.

Gordon, P. (1996). A Guide to Educational Research. New York: Routledge

Gregory, R. J. (2014). Psychological testing: History, principles and applications. New Delhi: Pearson.

Gupta, S. (2010). Research methodology and statistical techniques. New Delhi: Deep & Deep Publications Pvt. Ltd.

Kilkapatrick, D.L. (2005). Evaluating training Programmes: The four Levels. San Francisco: Brrett-Kochler.

Koul, L. (1984). Methodology of Educational Research. New Delhi: Vikas Publications.

Koul, L. (2009). Methodology of educational research. Noida: Vikas Publishing House Pvt. Ltd.

Kress, T. (2013). Using Critical Research for Educational and Social Change. New York & London: Routledge.

Lauren, B., Little, T. D., & Card, N. A. (2012). Developmental Research Methods. New York: The Guilford Press.

Martella, R. C., Nelson, J. R., Morgan, R. L., &Martella,N. E. (2013). Understanding and Interpreting Educational Research, New York: Routledge Guilford Press

Maykut, P., & Morehouse, R. (1994). Beginning Qualitative ResearchA Philosophic and Practical Guide. London: The Falmer Press.

Miller, S. A. (2007). Developmental Research Methods. New Delhi: Sage Publications.

Patton, M.Q. (2002). Qualitative Research and Evaluation Methods. C.A: Sage Publications.

Reynolds, C. R., Livingston, R. B., &Willson, V. (2009). Measurement and assessment in education. New Delhi: PHI Learning Private Limited.

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).

Bryman, Alan (2012): *Social Research Methods*, 4th ed., Oxford: Oxford University Press.

Bryman, Alan, (2018), *Social Research Methods,* (5thed.). New Delhi : Oxford University Press.

Della Porta, Donatella and Michael Keating (2008): —How Many Approaches in the Social Sciences? An Epistemological Introduction‖, in: Donatelladella Porta and Michael Keating(eds.),*Approaches and Methodologies in the Social Sciences, Cambridge :* Cambridge University Press.

Denzin, Norman and Yvonna Lincoln (2013): —*Introduction: The Discipline and Practice of Qualitative Research‖, in Norman Denzin and Yvonna Lincoln, Collecting and Interpreting Qualitative Materials*, London: Sage.

Giri, Arunangshu, Biswas, Debasish, (2019), *Research Methodology For Social Sciences,* New Delhi: Sage Publications India Pvt Ltd.

Kumar, Ranjit, (2019), *Research Methodology: A Step-By-Step Guide For Beginners,* (5thed.). New Delhi: Sage Publications Asia-Pacific Ltd.

Lune, Howard, Berg, Bruce, L.(2017), *Qualitative Research Methods For Social Sciences,* (9thed.).Pearson India.

Neuman, W. Lawrence, (2014), *Social Research Methods: Qualitative and Quantitative Approaches,*(7thed.).U.S.A: Pearson Education Limited.

Gupta, S.C. and Kumar, V. (2020), *Fundamentals of Mathematical Statistics*. Sultan Chand and Sons.

Course Title: Research and Publication Ethics

Course Code: PPH102

L	T	P	Credits
1	0	2	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 Hrs.)**

  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 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

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

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

PRACTICE

- **RPE 04: OPEN ACCESS PUBLISHING (4 Hrs.)**
  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 Suggester, etc.

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

  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 (7 Hrs.)**

  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

1. Bird, A. (2006). Philosophy of Science. Routledge.
2. MacIntyre, A. (1967) A Short History of Ethics. London.
3. P. Chaddah, (2018) Ethics in Competitive Research: Do not get scooped; do not get plagiarized, ISBN:978-9387480865
4. National Academy of Sciences, National Academy of Engineering and Instituteof Medicine. (2009). On Being a Scientist: A Guide to Responsible Conduct in Research: Third Edition. National Academies Press.
5. 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
6. Beall, J. (2012). Predatory publishers are corrupting open access. Nature, 489(7415), 179-179. https://doi.org/10.1038/489179a

IQAC

Course Title: Proficiency in Teaching

Course Code:PPH103

L	T	P	Credits
3	0	2	4

Total Hours: 60

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

1. Design and develop learner-centered instructional plans and learning outcomes.
2. Apply innovative teaching strategies and technologies to engage learners.
3. Explore different assessment methods to evaluate student learning.
4. Reflect on teaching experiences and continuously improve teaching practices.
5. Develop effective communication and classroom management skills.

Course Content

UNIT-I **15 Hours**

1. Overview of the course and its objectives - Theories of learning and their implications for teaching - Understanding the role of the teacher and student in the learning process
2. Writing clear and measurable learning outcomes - Backward design approach and aligning outcomes, assessments, and instructional strategies - Developing a course syllabus and instructional plan
3. Meaning Nature, definition, scope and importance and teaching. Types of teaching. Society and teaching, Research in teaching, Modern trends in teaching, creativity and teaching,

UNIT-II **15 Hours**

1. Understanding the diverse needs and backgrounds of learners - Creating an inclusive and supportive learning environment - Facilitating active learning and student engagement strategies
2. Lectures, discussions, and demonstrations - Group work, collaborative learning, and cooperative learning - Problem-based learning, case studies, and simulations
3. Skills based approach to teaching. Micro-teaching, Macro teaching. methods of teaching, lecture method project method and discussion method.

UNIT-III **15 Hours**

1. Integrating technology tools into instruction - Online and blended learning approaches - Using educational software and platforms effectively
2. Formative and summative assessment methods - Designing effective assessments to measure learning outcomes -Providing constructive feedback to students

UNIT-IV **15 Hours**

1. Verbal and non-verbal communication techniques - Active listening and questioning skills - Developing rapport with students and fostering positive relationships
2. The importance of reflective practice in teaching - Self-assessment and evaluation of teaching effectiveness - Engaging in ongoing professional development - Teaching in multicultural and international classrooms - Culturally responsive teaching practices
3. Meaning and concept of Technology, forms of Technology, Integration of technology in teaching and learning. Web based technology; E-learning and virtual learning. Evaluation of Technology-Meaning and purpose, types of technology evaluation; formative, summative, feasibility and maintenance

TRANSACTION MODE

Discussions, Case Studies, Microteaching, Classroom Observations, Peer Teaching: Video Analysis, Role-Playing, Teaching Demonstrations, Classroom Simulations, Reflective Journals/Blogs, Teaching Portfolios and Technology Integration

SUGGESTED READINGS

- Das, R.C. (1993): Educational Technology – A Basic Text, Sterling Publishers Pvt. Ltd.
- Evaut, M. The International Encyclopaedia of Educational Technology.
- Graeme, K. (1969): Blackboard to Computers: A Guide to Educational Aids, London, Ward Lock.
- Haas, K.B. and Packer, H.Q. (1990): Preparation and Use of Audio Visual Aids, 3rd Edition, Prentice Hall, Inc.
- Haseen Taj (2006):modern Educational Technology,Agra : H.P Bhargava Book House.
- Kumar, K.L. (2008): Educational Technology, New Age International Pvt. Ltd. Publishers, New Delhi (Second Revised Edition).
- Mukhopadhyay, M. (1990): Educational Technology – Year Book 1988, All India Association for Educational Technology, New Delhi.
- Bruce R Joyce and Marsha Weil, Models of Teaching, Prentice Hall of India Pvt Ltd, 1985.
- Gage N L , Hand book of Research on Teaching, Rand Mc Naly and Co., Chicago, 1968.
- Sharma R A, Technology of Teaching, International Publishing House, Meerut, 1988.
- Siddiqui M S., and Khan M S., Models of Teaching – Theory and Research, Manas Publication, New Delhi, 1991

Course Title: Computer Applications in Research

Course Code: PPH104

L	T	P	Credits
1	0	2	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.

Course Content

Unit -I **Hours 06**

Mendeley Software: Mendley software concept, features and uses-Installation of Mendeley software in your system Creating account. Installing as Plugin in Browser. Various third party Plugin for Mendeley.

Creating your library: Add PDFS to Mendeley-Import/export EndNote, BibTeX and RIS libraries- Document details lookup (CrossRef, PubMed, and Arxiv) -Google Scholar Search -One-click Web Importer -Watch folders to automatically add PDFs to Mendeley Desktop-Synchronize PDFs with your Mendeley Web account.

Unit-II **Hours 08**

Managing your documents and references: Merge duplicate author names, tags, or publications- Documents can be marked read/unread- Search as you type - Annotate PDFS-Multiple level undo in document details -Tag and edit multiple documents at once-File Organizer.

Citing references: Word and Open Office plug-in-Cite in Google documents (and other editors) -Cite using BibTeX.

Sharing Documents and References: How to Create a Group Adding members and documents Using Group.

Unit III **Hours 08**

Chat GPT: Working of ChatGPT, Role of ChatGPT in research, Advantages of ChatGPT, Query ChatGPT, Paraphrasing, Summarization, Table to Text and Text to Table, Translation to other language, Programming Code Generation and Explanation, Data Object Conversion (JSON to XML to CSV and Vice-versa). Creating Heading and Subheading. Writing and Blogging, Analtzing Data, Working with Email(creating, replying and improving).

LinkedIn: Introduction of Linkedin, Creating the Profile, Role of Linkedin in Research, Searching for Jobs, Applying for Jobs.

Research Gate: Introduction of Research Gate, Creating the Profile, Role of Researchgate in Research, Adding your research Article, Searching and sending request for research.

Unit IV **Hours 08**

Google Classroom: Introduction of Google Education Tools, Features of Google Class room.

Teacher Role: Creating Class or Group, Uploading Lecture/Documents, Creatingand Grading Assignment, Creating and Grading Quizes, Communication with Students and Parents, Creating Survey, Collecting Feedback, Post Announcements, Group Discussion

Supervisor/Leader Role: Create and Manage Class and Grade, Manage co-teacher and Roaster of Teacher, Group Discussion, Post Announcements.

Admin Role: Data Protection, Create Classes and Roaster, Adding and removing Students.

Scopus: Introduction of Scopus, Role of Scopus in Research, Understanding different Metrics of Scopus (SJR, Cite Score, H-index, Citation etc.)

Suggested Readings

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