



Syllabus Of Ph.D Course Work

Krishnaguru Adhyatmik Visvavidyalaya

Nasatra, Barpeta, Assam

781307



Ph.D. Course Work Syllabus
Course Title and Code: Research Methodology (PHD-C-5014)
Credit: 04
Krishnaguru Adhyatmik Visvavidyalaya
Total Marks 100 (80+20=100)

Learning Objective: To instill in students an in-depth knowledge of Research Methodology and enable them to conduct research in a scientific manner.

Block-I: Introduction to Research

Unit-I: Research Approaches: Historical approach, Case study approach, Descriptive approach and Experimental approach.

Unit-2: Types of research: Pure research-applied research; categories of research: ex-post facto research-experimental research-field investigation research-survey research-evaluation research-action research.

BLOCK-II:

Unit-I: Selection and Formulation of Research Problems: Factors to be considered in selection of Research Problem. Steps in formulation of problem.

BLOCK-III:

Unit-I: Research Design: Components of Research Design; Framing of hypothesis and research question.

BLOCK-IV:

Unit-I: Basic Statistical Concept: Types of variables-Quantitative and Qualitative; Reliability and validity-assessing reliability and validity of variables; confidence level and determination of size of samples.

Unit-2: Types of Sampling: Random and Non-Random sampling and their various kinds.
Total number of class= $4 \times 14 = 56$ classes of 1 hour duration

Internal Assessment: 10 Marks: 20 Marks for 1 Sessional Examination

5 Marks: 10 Marks for submission of a write-up on any one of the units

5 Marks: 10 Marks for presentation of the above write-up

Books recommended:**Text Books:**

1. The Essential Guide to doing Research; Zina O' Leary; Vistar Publications (A division of Sage Publication) New Delhi.
2. Research Methodology; C.R. Kothari, New Age International Publications, 2nd Edition.
3. Research Methodology, The What and How of Project Assignment and Seminar Paper: Dr. Mukunda Sarma; Eastern Book House (FBH) Publications, Panbazar, Guwahati, Assam
4. Practice of Social Research; E.R. Babbie, Belmont, CA; Wads worth.

Reference Books:

- 1) Hand Book of Research Design and Social Measurement : D.C. Miller and N.J. Salkind, Sage Publications, London.
- 2) Qualitative Research Methods for the Social Science; Allyn and Bacon Boston, MA
- 3) Qualitative and Quantitative Approaches: Sage Publications, London.

Ph.D. Course Work Syllabus
Course Title and Code: Research and Publication Ethics (PHD-C-5022)
Credit: 02
Krishnaguru Adhyatmik Visvavidyalaya
Total Marks 50 (40+10=50)

Course structure

- The course comprises of six modules listed in table below. Each module has 4-5 units.

Modules	Unit title	Teaching Units
Theory		
RPE 01	Philosophy and Ethics	4
RPE 02	Scientific Conduct	4
RPE 03	Publication Ethics	7
Practice		
RPE 04	Open Access Publishing	4
RPE 05	Publication Misconduct	4
RPE 06	Databases and Research Metrics	7
Total		30

Syllabus in detail

THEORY

☐ 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: 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

☐ 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 (4hrs.)

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 (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 (2hrs.)

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 (3hrs.)

1. Impact Factor of journal as per Journal Citation Report, SNIP, SJR,IPP, Cite Score
2. Metrics: h-index, g index, i10 index, altermetrics

References

- Birs, a.(2006). *Philosophy of Science*. Routledge.
- MacIntyre, Alasdair (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 Researrh: Third Edition*. National Academies Press.
- Resnik, D.B. (2011). What is ethics in research 7 why is it important. *National Institute of Environmental*
- *Health Sciences*, 1-10. Retrieved from <https://www.niehs.nih.gov/research/resources/bioethics/whatis/index.cfm>
- Beall, J. (2012). Predatory publishers are corrupting open access. *Nature*, 489(7415), 179-179.
- <https://doi.org/10.1038/489179a>
- Indian National Science Acedemy (INSA), *Ethics in Science Education, Reserch and Governance* (2019),
- ISBN:978-81-939482-1-7. <http://www.insaindia.res.in/pdf/Ethics Book.pdf>