

**SYLLABUS FOR PH. D. COURSEWORK**  
**Department of Political Science**  
**Cooch Behar Panchanan Barma University**

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**COURSE DESIGN**

<b>Course Code</b>	<b>Course Title</b>	<b>Credits</b>	<b>Marks</b>
Course - 1	Research Methodology	4	100
Course - 2	Literature Review/Field Survey/Research Publication (any one) and Seminar Presentation	4	100
CPE-RPE	Research and Publication Ethics	2	50
	Total	10	250

**Course Title: Research Methodology**

**Course Code: Course 1**

**Objective:** To identify and apply appropriate research methodology in order to plan, conduct and evaluate basic research. The Course will furthermore enable scholars to distinguish between the scientific method and common sense knowledge while laying the foundation for research skills at higher levels.

**1. Basics of Research**

Definition of research - Objective of research - Scientific research - Social science research  
 - Ethics in research, Plagiarism, How to write research proposal

**2. Types and Methods of Research**

Classification of Research- Pure and Applied Research - Exploring or Formulative Research - Descriptive Research - Diagnostic Research/Study - Evaluation Research/Studies - Action Research - Experimental Research - Analytical Study of Statistical Method - Historical Research - Surveys - Case Study - Field Studies

**3. Review of Literature**

Need for Reviewing Literature - What to Review and for What Purpose - Literature Search  
 - Procedure - Sources of Literature

**4. The Planning Process of Research**

Selection of a Problem for Research - Formulation of the Selected Problems - Hypothesis Formation - Measurement - Research Design/Plan, Research process

**5. Sampling**

Sampling Techniques or Methods - Choice of Sampling Techniques - Sample Size - Sampling and Non-Sampling Errors

**6. Methods of Data Collection**

Meaning and Importance of Data - Sources of Data - Use of Secondary Data - Methods of Collecting Primary Data

**7. Quantitative and Qualitative Data**

Observation Method - Experimentation - Simulation - Interviewing - Panel Method - Mail Survey Projective Technique - Sociometry

**8. Tools for Data Collection**

Types of Data - Construction of Schedules and Questionnaires - Measurement of Scales and Indices - Pilot Studies and Pre-tests

## **9. Field Work**

The Nature of Field Work - Selection and Training of Investigators - Sampling Frame and Sample Selection - Field Operation - Field Administration

## **10. Processing of Data**

Editing - Classification and Coding - Transcription - Tabulation - Introduction to Statistical Software: SPSS - Graphical Representation

## **11. Statistical Analysis of Data**

Statistical Analysis - Measures of Central Tendency - Measures of Dispersion - Measures of Association/Relationship - Regression and Correlation Analysis - Hypothesis Testing (For Proportion and Means) - Test of Significance

## **12. Computer Application in Research**

Introduction to MS Excel, Using Formulas and Functions, Hand on to SPSS, Features for Statistical Data Analysis, Generating Charts/Graphs, Introduction to MS Word, Features and Functions, Writing Report in MS Word, Introduction to Open Office or Latex, Creating Presentation in MS Power Point, Introduction to Internet Based Search, Use of Advanced Research Techniques

## **13. Report Writing**

Types of Reports - Planning of Report Writing - Research Report Format - Principles of Writing - Documentation - Data and Data Analysis in Thesis - Writing of Report - Typing of Report - Briefing - Preparation of Manuscript for Publication of Research Paper - Pictures and Graphs, Citation styles, Writing a Review of Paper, Bibliography, Writing Synopsis & Thesis.

### **Suggested Readings:**

1. Research Methodology: An Introduction by CR Kothari, New Age publication
2. Research Methodology: Methods and Techniques by C. R. Kothari, New Age International Publishers, ISBN:81-224-1522-9
3. Research Methodology for Business: A Skill Based Approach by Kumar, Shekaran (2009), New York, John Wiley Publishers.
4. Statistical Methods for Research Workers by Fisher R. A., Cosmo Publications, New Delhi ISBN:81-307-0128-6
5. Methodology of Research in Social Sciences by O. R. Krishnaswamy and M. Rangnatham Himalaya publication House, 2005, ISBN: 8184880936
6. Research Methodology-A Step-by-Step Guide for Beginners, Kumar, Ranjit. (2nd.ed), Pearson Education
7. Research Methodology: Concepts and cases by Chawla and Sondhi, Vikas Publication
8. Marketing Research, by Malhotra Naresh K. , Pearson Education Business Research Methods by Cooper & Schindler, Tata McGraw Hill
9. Sinha P.K., Computer Fundamentals, BPB Publishing
10. Power Analysis for experimental Research: A practical Guide for the Biological, Medical and Social Sciences by R. Barker Baushell, Yu-Fang Li Cambridge University Press

**Course Title: Research and Publication Ethics**

**Course Code: CPE-RPE**

**Objective:** To identify and apply the basics philosophy of science and ethics, research integrity, publication ethics and to minimize research misconduct and predatory publications.

**THEORY****1. Philosophy and ethics**

- i. Introduction to philosophy: definition, nature and scope, concept, branches
- ii. Ethics: definition, moral philosophy, nature of moral judgements and reactions

**2. Scientific Conduct**

- i. Ethics with respect to science and research
- ii. Intellectual honesty and research integrity
- iii. Scientific misconducts: Falsification, Fabrication, and Plagiarism (FFP)
- iv. Redundant publications: duplicate and overlapping publications, salami slicing
- v. Selective reporting and misrepresentation of data

**3. Publication Ethics**

- i. Publication ethics: definition, introduction and importance
- ii. Best practices/ standards setting initiatives and guidelines: COPE, WAME, etc.
- iii. Conflicts of interest
- iv. Publication misconduct: definition, concept, problems that lead to unethical behaviour and vice versa, types
- v. Violation of publication ethics, authorship and contributorship
- vi. Identification of publication misconduct, complaints and appeals
- vii. Predatory publishers and journals

**PRACTICE****4. Open Access Publishing**

- i. Open access publishing and initiatives
- ii. SHERPA/RoMEO online resource to check publisher copyright & self-archiving policies
- iii. Software tool to identify publications developed by SPPU
- iv. Journal finder/ journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer Journal suggester, etc.

**5. Publication Misconduct****A. Group Discussions**

- i. Subject specific ethical issues, FFP, authorship
- ii. Conflicts of interest
- iii. Complaints and appeals: examples and fraud from India and abroad

**B Software tools**

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

**6. Databases and Research Metrics****A. Database**

- i. Indexing databases
- ii. Citation databases: Web of Science, Scopus, etc.

**B. Research Metrics**

- i. Impact factor of journal as per Journal Citation Report, SNIP, SJR, IPP, Cite Score
- ii. Metrics: h-index, g index, i10 index, altmetrics

**Reference:**

- Bird, 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 Research: Third Edition, National Academies Press.
- Resnik, D.B.(2011) What is ethics in research & why is it important. National institute of Environmental Health Science, 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 Academy (INSA), Ethics in Science Education, Research and Governance (2019), ISBN:978-81-939482-1-7. [http://www.insaindia.res.in/pdf/Ethics\\_Book.pdf](http://www.insaindia.res.in/pdf/Ethics_Book.pdf).