

Curriculum for Doctor of Philosophy (Ph.D) Programme

**Syllabus of Ph.D. Coursework One
Semester (Educational Studies) With
effect from 2021**



**Swami Vivekananda Centre for Multidisciplinary
Research in Educational Studies**

**University of Calcutta recognized) Research Wing of
Ramakrishna Mission Sikshanamandira**

BELUR MATH, HOWRAH - 711202, WEST BENGAL

"To me the very essence of education is concentration of mind, not the collecting of facts. If I had to do my education over again and had any voice in the matter, I would not study facts at all. I would develop the power of concentration and detachment, and then with a perfect instrument I could collect facts at will. Side by side, in the child, should be developed the power of concentration and detachment."

— Swami Vivekananda

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Module No. 1*

Introduction to Methodology Educational Research

(Marks 70 Theoretical {3 Credits} + 30 Practical {1 credit}) = 4 Credits (75 hours) = **100 Marks**

Module No. 2*

Analyzing Data in Educational Research: Qualitative and Quantitative

(70 Theoretical {3 Credits} + 30 Practical {1 credit}) = 4 Credits (75 hours) = **100 Marks**

Module No. 3*

Research and Publication Ethics

(70 Theoretical {3 Credits} + 30 Practical {1 credit}) = 4 Credits (75 hours) = **100 Marks**

Module No. 4*

Research Orientation in Practice - 4 credits (120 hours)

4.1 :Data Analysis through Computer (Quantitative and Qualitative) = **50 Marks**

4.2 : (a) Book Review, (b) Article Review, (c) Tentative Proposal (To be done on proposed research area) (15+15+20) = **50 Marks**

Total = 16 credits - 345 hours = **400 Marks**

1 Credit (Theoretical = 15 Hours) & 1 Credit (Practical = 30 Hours) Time for written examination = 4 hours

Module No. 1

Introduction to Methodology of Educational Research

(70 Theoretical + 30 *Assignment)

F.M. - 100

Course Learning Outcomes (CLOs):

After completion of the Course the Scholars will be able to:

- *Understand the concept of educational research and its different aspects*
- *Understand different methods and instruments for data collection*
- *Make planning about his own research*
- *Write research proposal, Report his own research work*

Unit-1: Unit – 1: Introduction to Educational Research: Paradigms of Educational Research, Identification of Research Problem, Literature Review Framing Research questions and Hypotheses, Writing Research Proposal.

Unit-2: Quantitative Methods: Characteristics, Instrumentation, Sampling, Data collection procedure with respect to Non-Experimental (Survey, correlational, Ex-post facto etc.) and Experimental (true and quasi) design.

Unit-3: Qualitative Methods of Research: Characteristics, Strategies Data collection procedures with respect to Narrative, Phenomenological, Grounded Theory, Ethnographic, Case-study and Historical)

Unit-4: Mixed Method: Components, Strategies, Alternative Strategies, data Collection Procedures.

Unit – 5: Report Writing: Chapterization, Quantitative write-up, Qualitative Write-up, Mixed Method Write-up, and Referencing.

***Assignment: (1)** Exploration of the rationale of the Research Problem to be identified by the researcher from journal articles/ thesis.**(2).** Exploring research activity (research design/Method (s)/ Tools/ Techniques etc.) with reference to the research problem identified by the research scholar from journal articles/ thesis.

References:

- Creswell, J.W. (2009) – Research Design- qualitative, quantitative and mixed methods approaches. Sage
- Creswell, J.W. (2012) – Planning, Conducting, and Evaluating Quantitative and Qualitative Research, Sage.
- Hesse-Biber, S. N. and Leavy, P. (2006) – The Practice of Qualitative Research. Sage
- Punch, K.F. (2005) – Introduction to Social Research. Sage

Module No. 2

Analyzing Data in Educational Research: Quantitative and Qualitative

(70 Theoretical + 30 *Project.)

F.M. - 100

Course Learning Outcomes (CLOs):

After completion of the Course the Scholars will be able to:

- *After completion of these units the students will be able to analyze and interpret Quantitative/Qualitative data.*

Unit – 1: Concept of analysis with assumptions and uses: Significance of Mean, Standard error, and its difference, Significance of the difference between means (t-test), Mann-Whitney U test Chi-square.

Unit – II: Concept of analysis with assumptions and uses: Analysis of variance (ANOVA) and analysis of covariance (ANCOVA). Kruskal-Wallis Test.

Unit III: Concept of analysis with assumptions and uses: Correlational statistics: Partial, multiple, Regression and prediction, factor analysis.

Unit – IV: Concept of analysis of qualitative data: Phases of Compiling, Disassembling and Reassembling.

Unit – V: Concept of analysis of qualitative data: Phases of Interpreting and Concluding.

****Project on Qualitative / Quantitative Data Analysis with interpretation to be submitted**

Reference:

- Garrett, H.E. (1971). Statistics in Psychology and Education. Vakils, Feffer and Simons Ltd Yin, R. K. (2010), Qualitative Research from Start to Finish.
- Merriam, S. B. (2009), Qualitative research: A guide to design and implementation. Jossey-Bass
- Gall, D. M. et. al. (2007). Educational Research. Allyn & Bacon
- Burke, J. & Christensen. L. (2011) Education Research (4th Edition)

Module No. 3

Research and Publication Ethics

(70 Theoretical + 30 *Group discussion report)

F.M. - 100

After completion of these units the students will be able to understand and apply the knowledge of Scientific conduct in research, Ethics in research, Ethics in publication of research report, Sources of open access journals, details of indexing and research metrics

Unit 1: Philosophy and Ethics: - i. Introduction to philosophy: definition, nature and scope, concept, branches ii. Ethics: definition, moral philosophy, nature of moral judgments and reactions.

Unit 02: 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.

Unit 03: 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 behavior and vice versa, types (v). violation of publication ethics, authorship and contributor ship; (vi). Identification of publication misconduct, complaints and appeals. (vii). Predatory publishers and journals

Unit4: Open Access Publishing: - (i) Open access publications and initiatives; (ii) SHERPA/RoMEO online resource to check publisher copyright & self-archiving policies, (iii) Software tool to identify predatory publications developed by SPPU (iv) Journal finder / journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer, Journal Suggester, etc.

Unit 5: Publication Misconduct :- (i) Subject specific ethical issues, FFP, authorship (ii) Conflicts of interest (iii) Complaints and appeals: examples and fraud from India and abroad **(iv) Software tools -** Use of plagiarism software like Turnitin, Urkund and other open source software tools.

***Group Discussion report to be submitted on Databases and Research Metrics**

A. Databases-(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

References:

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 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 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

Module No. 4

Research Orientation in Practice

First Half: Data Analysis through Computer (Quantitative and Qualitative) (F.M-50)

Second Half: (i) Book Review, (ii) Article Review, (iii) Tentative Proposal (To be done on proposed research area) (15+15+20)