

**Department of Education
Assam University :: Silchar**

**Course Structure
Ph.D./M.Phil. Programme**

Course No- 501	Research & Publication Ethics (University Level)	2 Credits
Course No- 502	Qualitative & Quantitative Research (School Level)	4 Credits
Course No- 503	Research Methodology (Department Level)	4 Credits
Course No- 504	Term Paper (Departmental Level)	6 Credits

Ph.D./M.Phil.
COURSE NO- 501
RESEARCH & PUBLICATION ETHICS (RPE)
(University Level Course)

2 Credits

Full Marks- 100

THEORY

RPE: I : PHILOSOPHY AND ETHICS

- a) Introduction to philosophy: definition, nature and scope, concept, branches
- b) Ethics: definition, moral philosophy, nature of moral judgements and reactions

RPE: II : SCIENTIFIC CONDUCT

- a) Ethics with respect to science and research
- b) Intellectual honesty and research integrity
- c) Scientific misconducts: Falsification, Fabrication, and Plagiarism (FFP)
- d) Redundant publications: duplicate and overlapping publications, salami slicing
- e) Selective reporting and misrepresentation of data

RPE: III : PUBLICATION ETHICS

- a) Publication ethics: definition, introduction and importance
- b) Best practices / standards setting initiatives and guidelines: COPE, WAME, etc
- c) Conflicts of interest
- d) Publication misconduct: definition, concept, problems that lead to unethical behaviour and vice versa, types
- e) Violation of publication ethics, authorship and contributorship
- f) Identification of publication misconduct, complaints and appeals
- g) Predatory publishers and journals

PRACTICE

RPE: IV : OPEN ACCESS PUBLISHING

- a) Open access publications and initiatives
- b) SHERPA/RoMEO Online resource to check publisher copyright & self-archiving policies
- c) Software tool to identify predatory publications developed by SPPU
- d) Journal finder / journal suggestion tools viz., JANE, Elsevier Journal Finder, Springer Journal Suggester, etc.

RPE: V : PUBLICATION MISCONDUCT

- A) Group Discussions (2 hrs.)**
 - a) Subject specific ethical issues, FFP, authorship
 - b) Conflicts of interest
 - c) Complaints and appeals: examples and fraud from India and abroad

- B) Software tools (2 hrs.)**
 - a) Use of Plagiarism software like Turnitin, Urkund and other open source software tools

RPE: VI : DATABASES AND RESEARCH METRICS

- A) Databases (4 hrs.)**
 - a) Indexing databases
 - b) Citation databases: Web of Science, Scopus, etc.

- B) Research Metrics (3 hrs.)**
 - a) Impact factor of journal as per Journal Citation Report, SNIP, SJR, IPP, Cite Score
 - b) Metrics: h-index, g index, i10 index, altmetrics

Ph.D./M.Phil.

COURSE NO- 502
QUALITATIVE AND QUANTITATIVE RESEARCH
(School Level Course)
4 Credits

Full Marks- 100

UNIT: I : INTRODUCTION TO EDUCATIONAL RESEARCH

- c) Meaning and Concept of Scientific Research
- d) Meaning and Concept of Educational Research
- e) Recent trends in Educational Research
- f) Priority areas of Educational Research
- g) Characteristics of a good research problem

Unit- II : THE PROCESS OF RESEARCH

- (a) Identification of Research Problem & Defining a research problem: objectives, hypothesis & delimiting the study
- (b) Review of Related Literature
- (c) Different Research Designs
- (d) Methodology of the study: Population & sampling procedure
- (e) Data collection procedure in Qualitative & Quantitative **research**

UNIT: III: QUALITATIVE RESEARCH

- a) Meaning and concept of Qualitative Research
- b) Research Questions and Theoretical Traditions
- c) Research Strategies- Document or Content Analysis, The Case Study, Ethnographic Studies
- d) Design and Method-Data collection Strategies-field work, field notes
- e) Data Analysis and Interpretation of Qualitative Research

UNIT-IV: QUANTITATIVE RESEARCH

- a) Meaning and concept of Quantitative Research
- b) Basic Elements of Quantitative Research- Variables, Hypothesis
- c) Design-Experimental and Quasi Experimental
- d) Scale of Measurement- Nominal, Ordinal, Interval and Ratio
- e) Computer applications in Educational Research

UNIT-V: TOOLS AND ITS STANDARDISATION

- a) Attitude Scale, Aptitude Scale, Interview
- b) Observation, Questionnaire and Standardized test
- c) Meaning and Construction procedure of Standardized test
- d) Reliability-Test Re-Test, Split Half, Parallel Form and Internal Consistency method
- e) Validity- Face, Concurrent, Construct and Empirical Validity
- f) Use of SPSS

SUGGESTED READINGS:

- Anderson, J.B.H., Durston, & M. Poole. (1971). Thesis and assignment writing. Eiley Eastern Ltd, New Delhi.
- Burns, R.B. (2000). Introductions to Research methods. New Delhi: Sage Publication.
- Best, J.W. (1977). Research in Education. Prentice-Hall of India Pvt. Ltd. New Delhi.
- Burtan Dawn (Ed.). (2000).Research Training for Social Science. New Delhi: Sage Publication.
- Cochran, W.G. ,& M.G.Cox. (1946). Experimental designs. John Wiley & Sons, New York.
- Fisher, R. A. (1935). The design of experiements. Oliver and Boyd, London.
- Fox, David J. (1969). Research process in Education. Holt, Rinhart and Winston.
- Garrett, H.E. (1971). Statistics in Psychology and Education. Bombay: Vakils,Feffer and Simon Pvt. Ltd.
- Guilford, J.P. (1965). Fundamental statistics in Psychology and Education.Mc Grow Hill Book Company, New York.
- Good Carler, V. K. & others. (1941). Methodology of Educational Research, Appleton Century Cropts, New York.
- Mertens, D.M .(1997).Research method in Education And Psychology. New Delhi: Sage Publication.
- Punch ,K.F . (1998). Introduction to Social Research- Quantitative and Qualitative Approaches. New Delhi: Sage Publication.
- Srikin , R.M (1999).Statistics for social Science . New Delhi: Sage Publication.
- Stringer, E.T. (2000). Action Research. New Delhi: Sage Publication.
- Sigel, S. & Castellan, N.J. (1988). Nonparametric Statistics for the behavioural Sciences (2nd edition), Mc Graw Hill Book, Co, Singapore.

Ph.D./M.Phil.

COURSE NO- 503

RESEARCH METHODOLOGY

(Departmental Level Course)

4 Credits

Full Marks- 100

Unit-I - DESCRIPTIVE RESEARCH

- (a) Descriptive research- meaning, importance and scope
- (b) Types of descriptive research-Survey, Developmental studies,
- (c) Evaluation Study, Follow up studies and Co-relational research
- (d) Various steps of Descriptive Research
- (e) Data analysis and interpretation of descriptive research

Unit-II - HISTORICAL RESEARCH

- (a) Historical Research- meaning, importance and scope
- (b) Types of historical research- bibliographic, legal,
- (c) Study of educational institution, study of history of ideas, Steps of historical research
- (d) Historical Criticism-Internal and external criticism
- (e) Data analysis and writing the Historical Report

Unit-III - EXPERIMENTAL RESEARCH

- (a) Experimental Research- meaning, importance and characteristics
- (b) Experimental designs- quasi, factorial, single subject and group designs
- (c) Variables- independent, dependent, controlling and extraneous
- (d) Validity- Internal validity and external validity
- (e) Data analysis and interpretation of experimental research

UNIT- V - STATISTICAL TECHNIQUES FOR DATA ANALYSIS AND ITS INTERPRETATION

- a) Procedure for Tabulation of research data
- b) Measures of Central Tendencies and Variability
- c) Measures of Relationship, NPC
- d) The Null Hypothesis- Test of Significance, Level of Significance
- e) Significance difference between mean and other statistics
- f) Chi-Square, ANOVA

Unit-V- SYNOPSIS PREPARATION & REPORTING

- (a) Fundamentals of academic writing
- (b) Developing a research proposal: steps and structure
- (c) Writing research report/thesis: steps and structure
- (d) Reporting the progress of work
- (e) Publishing research papers

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Anderson, J.B.H., Durston, & M. Poole. (1971). Thesis and assignment writing. Eiley Eastern Ltd, New Delhi.

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Burtan Dawn (Ed.). (2000).Research Training for Social Science. New Delhi: Sage Publication.

Cochram, W.G. ,& M.G.Cox. (1946). Experimental designs. John Wiley & Sons, New York.

Fisher, R. A. (1935). The design of experiments. Oliver and Boyd, London.

Fox, David J. (1969). Research process in Education. Holt, Rinhart and Winston.

Garrett, H.E. (1971). Statistics in Psychology and Education. Bombay: Vakils,Feffer and Simon Pvt. Ltd.

Guilford, J.P. (1965). Fundamental statistics in Psychology and Education. Mc Grow Hill Book Company, New York.

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Mertens, D.M .(1997).Research method in Education And Psychology. New Delhi: Sage Publication.

Punch ,K.F . (1998). Introduction to Social Research- Quantitative and Qualitative Approaches. New Delhi: Sage Publication.

Srikin , R.M (1999).Statistics for social Science . New Delhi: Sage Publication.

Stringer, E.T. (2000). Action Research. New Delhi: Sage Publication.

Sigel, S. & Castellan, N.J. (1988). Nonparametric Statistics for the behavioural Sciences (2nd edition), Mc Graw Hill Book, Co, Singapore.

Ph.D./M.Phil. COURSE NO- 504

TERM PAPER

(Departmental Level Course)

6 Credits

Full Marks- 100

A Research Proposal has to be prepared by the scholar with a comprehensive Rreview of Literature and have to defend it in their respective RAC'S.