DEPARTMENT OF EDUCATION

SYLLABUS FOR Ph.D Course Work



RAJIV GANDHI UNIVERSITY

RONO HILLS: DOIMUKH

ARUNACHAL PRADESH

DEPARTMENT OF EDUATION

RAJIV GANDHI UNIVERSITY

Credit-4 Full Mark-75 Pass Mark-38

SYLLABUS FOR PH.D COURSE WORK P-1 METHODOLOGY OF RESEARCH IN EDUCATION

Learning objectives

- 1. To know the conceptual framework of educational research, research process, methods, tools and techniques
- 2. To understand concept of variables, hypothesis, sources of hypothesis, testing of hypothesis and sampling techniques
- 3. To know new approaches of educational research with regard to qualitative research.
- 4. To understand how to review literature, selection of the research problem and report writing

Course Content:

Unit-I: Research in Education

- Research and Steps of Research in Education
- Methods: Historical Method, Descriptive Method, Experimental method
- Tools and Techniques: Tools of Research and their characteristics: reliability and validity
- Construction and Standardization of Tests and Attitude Scale

Unit-II: Variable, Hypotheses & Sampling

- -Concept of variable/variables in research, types of variables.
- Meaning of hypothesis, need of hypothesis, Sources of Hypothesis and testing
- Sampling Techniques

Unit-III: New Approaches of Educational Research-Qualitative Research

- Interdisciplinary Research
- Phenomenological Research
- Ethnographical Research
- Mixed- Methodology

Unit IV: Review of Literature, Selection of Research problem and Report Writing

- Review of Literature, Procedure and Sources, Organization of literature, Selection of Research Problem, Preparation of Synopsis/Research Proposal, Procedure of Report Writing.
- Select a Research Problem of your own choice and write a review of related literature on it and presentation in a seminar by the concerned teacher.

Expected learning outcomes

After the completion of the course students are expected to

- 1. To analyse research methods, tools and techniques appropriately while doing research in education
- 2. To explain the meaning of variables and hypothesis and to apply suitable statistics for testing hypothesis
- 3. To differentiate among qualitative approaches of educational research.
- 4. To follow procedures and organization of the literature systematically and to select problems for writing review of related literature.

Mode of Transaction: Lecture Method, Discussion Method, Activity Method

Scheme of Evaluation: The question paper will possess 75 marks and the pattern of questions will be essay type. There will be 8 questions from the four units. Each question carries 15 marks. The candidate has to attempt 5 questions out of the 8 questions. The Scholar is to pass internal and external test by obtaining 50% marks in each separately.

References:

- 1. American Educational Research Association (1992). AERA ethical standards, Washington DC. AERA.
- 2. American Educational Research Association (2011). Code of Ethics of AERA, Washington DC. AERA.
- 3. British Educational Research Association (2018). Ethical guidelines for educational research, London BERA.
- 4. Buchanan, Elizabeth (2003). Readings in Virtual Research Ethics: Issues and Controversies: Information Science Publishing.
- Comstock, Gary (2013). Research Ethics: A Philosophical Guide to the Responsible Conduct of Research: Cambridge University Press.
- 6. <u>Elliott</u>, Deni (1997) .Research Ethics A Reader: University Press of New England.
- 7. Jones, Julie Scott (2011). Research Ethics in Practice (Fundamentals of Applied Research): SAGE Publications Ltd.
- 8. Pruzan, Peter (2011). Research Methodology: The Aims, Practices and Ethics of Science: Springer.

- 9. Punch, Keith F (2013). Introduction to Social Research: Quantitative and Qualitative Approaches: SAGE Publications Ltd.
- 10. Strike, K.A (2006). The ethics of educational research in handbook of complementary methods in education research. http://www.rouledgehandsodes.com/doi/10.4324/978020387469 . ch.3.
- 11. Thorat, Sukhadeo et al. (2018). Social Science Research in India: Status, Issues, and Policies: Oxford Publishing House.
- 12. Tolich, Martin (2009). Qualitative Ethics in Practice (Developing Qualitative Inquiry Book 14): Routledge.
- 13. Welfel, Elizabeth Reynolds (2019). Ethics in Counseling and Psychotherapy: Standards, Research and Emerging Issues: Cengage India.
- 14. Wiles, Rose (2012). What Are Qualitative Research Ethics?: Bloomsbury Publishing India.

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SYLLABUS FOR PH.D COURSE WORK P-II QUANTITATIVE ANALYSIS

Learning objectives

- 1. To understand the nature of quantitative data and descriptive statistics
- 2. To analyse various measure for co-relation
- 3. To know how to apply parametric and non parametric test in quantitative research
- 4. To familiarize with SPSS in computation of data and graphical representation

Unit-I: Descriptive Statistics

- Measures of Central Tendency: Mean, Median and Mode
- Measures of Variability: Range(R), QD, MD and SD

Unit-II: Correlation and Causation

- -Concept of Correlation and its implications in research work
- -Methods of computing correlation: Pearsons' coefficient of correlation, Spearman's coefficient of correlation, partial and multiple correlations

Unit-III: Inferential Statistics

- -Parametric test: t-test- concept, assumptions, and applications
- -F-test-concept, assumptions, and applications; one way ANOVA and two way ANOVA and Chi-Square test
- -Non-parametric test: U-test and H-test

Unit-IV: Computer Applications in Research

- -Application of computer in educational research
- -Introduction to SPSS and use of SPSS in computation of data and graphs
- -Mean, SD, t-test, F-test and Chi Square Test using SPSS

Expected Learning outcomes:

- 1. To explain the nature of quantitative data apply appropriate descriptive statistics or summarizing given data
- 2. To compute co-relation using various methods

- 3. To use parametric and non parametric test based on assumptions for given quantitative data
- 4. To use SPSS in computing quantitative data various statistics and to represent quantitative data graphically for clear perception.

Mode of Transaction: Lecture Method, Discussion Method, Activity Method

Scheme of Evaluation: The question paper will possess 75 marks and the pattern of questions will be essay type. There will be 8 questions from the four units. Each question carries 15 marks. The candidate has to attempt 5 questions out of the 8 questions. The Scholar is to pass internal and external test by obtaining 50% marks in each separately.

References:

- 15. American Educational Research Association (1992). AERA ethical standards, Washington DC. AERA.
- 16. American Educational Research Association (2011). Code of Ethics of AERA, Washington DC. AERA.
- 17. British Educational Research Association (2018). Ethical guidelines for educational research, London BERA.
- 18. Buchanan, Elizabeth (2003). Readings in Virtual Research Ethics: Issues and Controversies: Information Science Publishing.
- 19. <u>Comstock</u>, Gary (2013). Research Ethics: A Philosophical Guide to the Responsible Conduct of Research: Cambridge University Press.
- 20. Elliott, Deni (1997) .Research Ethics A Reader: University Press of New England.
- 21. Jones, Julie Scott (2011). Research Ethics in Practice (Fundamentals of Applied Research): SAGE Publications Ltd.
- 22. Pruzan, Peter (2011). Research Methodology: The Aims, Practices and Ethics of Science: Springer.
- 23. Punch, Keith F (2013). Introduction to Social Research: Quantitative and Qualitative Approaches: SAGE Publications Ltd.
- 24. Strike, K.A (2006). The ethics of educational research in handbook of complementary methods in education research. http://www.rouledgehandsodes.com/doi/10.4324/978020387469 . ch.3.
- 25. Thorat, Sukhadeo et al. (2018). Social Science Research in India: Status, Issues, and Policies: Oxford Publishing House.
- 26. Tolich, Martin (2009). Qualitative Ethics in Practice (Developing Qualitative Inquiry Book 14): Routledge.

- 27. Welfel, Elizabeth Reynolds (2019). Ethics in Counseling and Psychotherapy: Standards, Research and Emerging Issues: Cengage India.
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SYLLABUS FOR PH.D COURSE WORK P-III: RESERCH PUBLICATION ETHICS

Learning objectives

- 1. To know research ethics in educational research and scientific content in educational research
- 2. To understand research ethics in relation to publications
- 3. To familiarize with open access publication sources, copy rights and self achieving policies
- 4. To analyse various issues related to falsification, fabrication and plagiarism

Unit-I: Introduction to Ethics and Scientific conduct in Educational Research:

(3Hrs)

- Ethics: Concept, moral philosophy nature of moral judgments and reactions in educational research
- Philosophical Attitude in Research.
- Intellectual Honesty and Research Integrity: Concept and Importance
- Scientific Misconducts: Falsification, Fabrication and Plagiarism (FFP)
- Redundant Publication: Duplicate and Overlapping publications, Salami Slicing
- Selective Reporting and Misinterpretations of Data.

Unit-II: Ethics in Research Publications:

(7Hrs)

- Publication Ethics: Meaning and importance.
- Best practices and Quality mandates in Research: Committee on Publications Ethics (COPE) and its role, World Association of Medical Editors (WAME)- Its Functions.
- Publication Misconducts: Meaning, problems and types, identifications of publication misconducts, complaints and appeals.
- Predatory Publishers and Journals.

Unit-III: Practice (Group Discussion, Seminar/Hands on Experiences) Open access publishing and publications misconduct in Educational Research: (4 Hrs)

- Open Access Publications Sources
- Publisher's copy-right and self achieving policies : (SHERPA) and ROMEO as Online Resources.

- SPPU : Software identification for predatory publications
- JANE, Elsevier Journal Finder, Springer & Journal suggester in Journal Finders.

Unit-IV: Publication Misconduct, Data Bases & Research Metrics (11Hrs) (Activity- Group- Discussion/Seminar presentation/ Hands on Experiences)

- FFP issues in Educational Research
- Creation and practice on account relating to Plagiarism, Detection Software (PDS) like- URKUND and TURNITIN.
- Indexing Databases citation Databases : Scopus & Web of Science etc,
- UGC- CARE
- Impact Factor: SNIP, SJR, IPP, Cite score.
- Research Metrics: h-Index, g-index, i10 index, altmetrics.

Learning outcomes

- 1. To follow research ethics in education research and scientific conduct in educational research
- 2. To apply research ethics in publishing a research work
- 3. To use open access publication sources such as Elsevier, Journal Finder, and Springer etc.
- 4. To avoid mal practices of falsification, fabrication and Plagiarism

Mode of Transaction: Lecture Method, Discussion Method, Activity Method

Scheme of Evaluation: The question paper will possess 75 marks and the pattern of questions will be essay type. There will be 8 questions from the four units. Each question carries 15 marks. The candidate has to attempt 5 questions out of the 8 questions. The Scholar is to pass internal and external test by obtaining 50% marks in each separately.

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