Institute of Education and Research
Faculty of Education
University of the Punjab, Lahore

Program	Bachelor of Education (B.Ed.)

Course Title: Research in Education	Course Type: Major Course of Education

Course Code: MCEd-304	Credit Hours: 3	Duration: 16 Weeks

Introduction	This course is an introduction to educational research and methods used in the study of educational settings and institutions. One of the major purposes of this course is to familiarize students with basic methods and techniques for designing, conducting, and analysing research in education. Emphasis is on developing appropriate and researchable questions, reviewing the literature critically, and planning cogent research. Equal attention will be paid to the process of instrument development (e.g. attitude scale, questionnaire) so that valid and reliable data can be produced and subsequently analysed. The second major purpose of this course is to build up a solid knowledge base on which selection of an appropriate statistical tool from a variety of parametric and non-parametric procedures can be made. Extensive emphasis will be placed on using the most modern tools for locating information resources and for communicating and sharing research knowledge with fellow student's and other professionals. Thus tools such as e-mail, the Internet, the World Wide Web. Electronic data base, and electronic search engines are integral part of this course.
Learning Objectives	After studying the course students will be able to: 1. Understand and describe the importance and use of educational research. 2. Identify and discuss the major types of research methodologies; 3. Identify and conceptualize research question and problem statements. 4. Review and evaluate relevant literature; 5. Formulate and state the hypotheses; 6. Describe techniques related to sampling, statistical analysis, and research design. 7. Develop data collection instruments commonly used in research in education; 8. Define and discuss the concept of validity and reliability; 9. Analyse and interpret statistical data 10. Use the Internet for access to ERIC, the www., e-mail and other informational resources; 11. Develop a research proposal; 12. Evaluate a research report/article.

Course Content	1. **Introduction to educational research**
	1.1 Meaning and definition of educational research
	1.2 The scientific method
	1.3 Purposes and features of research
	1.4 Application of the scientific methods in education
	2. Types of research
	2.1 Basic verses applied research
	2.2 Historical research
	2.3 Descriptive research
	2.4 Correlational research
	2.5 Causal comparative research
	2.6 Experimental research
	2.7 Action research
	2.8 Qualitative and quantitative research
	3. Research problem
	3.1 Selection
	3.2 Sources
	3.3 Characteristics/criteria
	3.4 Statement
	4. Review of related literature
	4.1 Definition, purpose, and scope
	4.2 Preparation
	4.3 Sources
	4.4 Abstracting
	4.5 Reporting
	5. Research hypothesis or questions
	5.1 Definition and purpose
	5.2 Characteristics
	5.3 Types of hypotheses
	5.4 Stating the hypothesis/question
	6. Sampling
	6.1 Definition and purpose
	6.2 Techniques of sampling
	6.3 Probability sampling techniques
	6.4 Random sampling
	6.5 Stratified sampling
	6.6 Cluster sampling
	6.7 Systematic sampling
	6.8 Non-probability sampling techniques
	6.9 Convenience sampling
	6.10 Purposive/judgmental sampling
	6.11 Snowball sampling
	6.12 Quota sampling

	7. Research instruments
	    7.1 Purpose of research instruments
	    7.2 Characteristics of research instruments
	    7.3 Validity
	    7.4 Reliability
	    7.5 Usability
	    7.6 Construction of instruments
	    7.7 Questionnaire
	    7.8 Observation scale
	    7.9 Rating scale
	    7.10 Tests (and their types)
	8. Research types (detail description)
	    8.1 Historical research
	    8.2 Descriptive research
	    8.3 Correlational research
	    8.4 Causal-comparative research
	    8.5 Experimental research
	9. Collection and analysis of data
	    9.1 Data collection
	    9.2 Scoring, coding and tabulation of data
	    9.3 Data analysis
	    9.4 Interpretation of data
	10. Statistics in education
	    10.1 Need of statistical analysis
	    10.2 Levels of measurement
	    10.3 Descriptive statistics
	    10.4 Inferential statistics
	    10.5 Parametric tests (t-test, f-test)
	    10.6 Non-parametric test (x^2)
	11. Writing research proposal and report
	    11.1 General rules for writing and typing
	    11.2 Formal and style
	    11.3 Type of research reports
	    11.4 Theses and dissertations
	    11.5 Journals article
	    11.6 Papers read at professional meetings

Text Book(s)	Creswell, J. W. (2014). *Research design: Quantitative, qualitative and mixed methods approaches.* London: Sage Publications. Creswell, J. W. (2012). *Research design: Planning, conducting, and evaluating Quantitative, qualitative research.* London: Pearson. Fraenkel, J. R., Wallen, E. N., & Hyun, H. H. (2012).*How to design and evaluate research in education.* New York: McGraw-Hill. Gall, M. D., Gall, J. P., & Borg, W. R. (2003).*Educational research: An introduction.* New York: Pearson

	Gay, L.R. (2012). *Educational research: competencies for analysis and application*. New York: Macmillan Publishing Co. Johnson, B., & Christensen, L. (2012).*Educational research: Quantitative, qualitative and mixed approaches*. London: Sage Publications.
Suggested Reading	Anderson, G., & Arsenault, N. (1998).*Fundamental of educational research (2ⁿᵈed)*. London: The Falmer Press. Abell, N., Springer, D. W., &Kamata, A. (2009).*Developing and validating rapid assessment instrument*. New York: Oxford University Press. Babbie, E. (2010, 2007). *The practice of social research*. Australia: Wadsworth Cengage Learning. Cohen, L., Manion, L., & Morrison, K. (2007).*Research methods in education (5ᵗʰ ed.)*. New York: Routledge. Colton, D., & Covert, R. W. (2007).*Designing and constructing instruments for social research and evaluation.*United State of America: Jhon Wiley & Sons, Inc. DeMarrais, K. &Lapan, S. D. (2004).*Foundations for research methods of inquiry in education and social science.*London: Lawrence Erlbaum Associates Publishers. Fink, A. (2014). *Conducting research literature reviews: From the internet to paper*. Los Angeles: Sage Publications. McCoach, B. D., Gable, R. K., & Madura, J. P. (2013). *Instrument development in the affective domain: School and corporate Applications*. New York: Springer. Neuman, W. L. (2015). *Social research methods: Qualitative and quantitative approaches*. New Dehli: Pearson. Ridley, D. (2012). *The literature review: A step-by-step guide for students*. Los Angeles: Sage Publications. Scott, D., & Usher, R. (2011).*Researching education: Data, methods and theory in educational enquiry*. London: Sage.
Teaching/Learning Strategies	Lecture Discussion Cooperative Learning Class activities Applied Projects
Evaluation Criteria	Assignment/Project/Presentation 25% Mid Term 35% Final Term 40%