

COURSE WORK IN EDUCATIONAL RESEARCH AND STATISTICS AT Ph.D. LEVEL

OBJECTIVES:

17 CREDITS

At the end of this course, the students will be able to:

- Explain and compare humanistic, scientific and policy research in education
- Use and apply advanced statistical procedures in analyzing data
- Prepare Synopsis
- Interpret research findings

UNIT-I: Humanistic Research Methods

02 Credit

Humanistic research procedure
Analysis of evidence in Humanistic studies

UNIT-II: Scientific Research Procedure

03 Credit

Sampling research procedure
Preparation of Synopsis
Differences among need, rationale and significance of the study
Procedure of writing review: Integration of findings
Thesis writing: Steps, Chapters, Tables, Interpretation
Discussion of result
Bibliography or References: Method and Procedure

UNIT-III: Policy Research

02 Credit

Educational research and policy making
Policy oriented research: Trends, developmental, experimental and evaluative studies
Implications of Policy research

UNIT-IV: Use and Approach of Advanced Statistical Problem

04 Credit

ANCOVA with two three or more covariate
Canonical Analysis
Discriminant Analysis
Meta Analysis
Multilevel Analysis
Significance level v/s magnitude of effect size

UNIT-V: Research Designs

02 Credit

Randomized Group designs
Latin Square design
Factorial design of experiment

UNIT-VI: Statistical Analysis

02 Credit

Parametric and Non-parametric statistics
Simple statistical applications such as t, F, ANOVA
Non-parametric statistics such as χ^2 , Mannwhitney u tests, ks tests.

UNIT-VII: Applications of computer in Educational Research

02 Credit

Uses of computer in data analysis.
Preparation of Tables.

Test and Practicum

1. Two test of 10 marks each (Average of both the test will decide test marks out of 10)
2. Writing review of related research & literature on the problem finalized for Ph.D. Work.

Mode of Transaction

Lecture-cum discussion, teaching, learning strategies may be used to transact the curriculum. In some cases project may be assigned.

Evaluation

At the end of the course, university will conduct examination carrying one paper of 80 marks

Attendance: As per University rules

Award of Certificate: those students who secure 75% and above marks (out of total 100 marks) will be given certificate of successfully completed Ph.D. (Education) course work. Those students who secure less than 75% marks will be given two chances to appear in the next Ph.D course examinations.

Books:

Edwards, A.L.(1968). Experimental Design in Psychological Research, New York, American Publishing Co. Pvt. Ltd.

Campbell, D.T. and Fiske, D.W.(1959). Convergent and Discrimination Validation by Multi Trait – Multi Method Matrix. Psychological Bulletin, 5, 81-105.

Keeves, J.P.(1988). Educational Research, Methodology and Measurement. An international Handbook Oxford, Pergamon Press.

Learner, D. & Lasswell, H.(Eds.) (1951). The Policy Science. California Stanford.

Meltsner, A.J.(1976). Policy Analysis in the Bureaucracy. California: University of California, Press.

Wilson, J.Q.(1981). Policy Intellectual and Public Policy. Public Interest, 64, 31-46.

Winner, B.J.(1962). Statistical Principles in Experimental Design. Newyork: McGraw Hill.