**B.Ed. Special Education (VI/ID)**

**Title of the Course: Basic Research and Basic Statistics (D-19)**

**(Semester: IV)**

 **Credits: 2**

 **MM: 50 (External: 35 Internal: 15)**

 **Contact Week 15**

**Introduction of the Course**

Research purifies human life. It improves its quality. It is search for knowledge. It shows how to solve any problem scientifically. It is a careful enquiry through search for any kind of Knowledge. It is a journey from known to unknown, a systematic effort to gain new knowledge in any kind of discipline. When it seeks a solution of any educational problem it leads to educational research. When educationists do research, they are applying the Scientific methods in solving the practical problems of education. Through research an effort is made to extend the frontiers of knowledge in order to improve teaching effectiveness in the field of education.

**Learning Outcomes**

After completion of the course student will be able to:

1. Describe the concept and relevance of research in education and special education.
2. Develop an understanding of the research process and acquire competencies for

conducting a research.

3. Apply suitable measures for data organization and analysis.

**Unit I: Introduction to Research (10 hours)**

1.1 Scientific Method

1.2 Research: Concept and Definition

1.3 Application of Scientific Method In Research

1.4 Purpose of Research

1.5 Research in Education and Special Education

 **Unit 2: Types and Process of Research (10 hours)**

2.1 Types of Research

- Basic/Fundamental

- Applied

- Action

2.2 Process of Research

- Selection of Problem

- Formulation of Hypothesis

- Collection of Data

- Analysis of Data and Conclusion

2.3 Tools of Research: Tests, Questionnaire, Checklist and Rating Scale

2.4 Action Research in Teaching Learning Process

2.5 Professional Competencies & Ethics for Research

**Unit 3: Measurement and Analysis of Data (10 hours)**

3.1 Scale for measurement: Nominal, Ordinal, Interval and Ratio

3.2 Organization of data: Array, Grouped distribution

3.3 Measures of central tendency and Dispersion: Mean, Median and Mode,

Standard deviation and Quartile deviation

3.4 Correlation: Product Moment and Rank Order Correlation

3.5 Graphic representation of data

**Practicum/ field engagement/Suggested Projects / Assignments (Any Two)**

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| --- |
| * Develop a teacher made test for a given subject matter
* Develop a questionnaire/checklist
* Develop an outline for conducting action research
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**Note:** On the basis of the above, the teacher may design his/her own relevant projects/ assignments.

**Essential/ Recommended Readings**

* Best, J. W., &amp; Kahn, J. V. (1996). Research in Education Prentice-Hall of India New

Delhi.

* Dooley, D. (1997). Social Research Methods. Prentice-Hall of India, New Delhi.
* Grewal, P.S. (1990). Methods of Statistical Analysis. Sterling Publishers, New Delhi.
* Guptha, S. (2003). Research Methodology and Statistical Techniques. Deep &amp; Deep
* Publishing, New Delhi.
* Koul, L. (1996). Methodology of Educational Research. Vikas Publishing House,

New Delhi.

* Potti, L.R. (2004). Research Methodology. Yamuna Publications,

Thiruvananathapuram.

**Additional Readings**

* Cohen, J. (1988). Statistical Power Analysis for the Behavioral Sciences. Academic
* Press, New York.

• Greene, S., &amp; Hogan, D. (2005). Researching children&#39;s experience. Sage Publication: London.

**Teaching Learning Process**

The course will be taught through interactive pedagogic methods such as classroom discussion, debates, film discussions, critical media analysis, collaborative learning tasks which enhance reading comprehension of core writings in the area and innovative projects. Reflective expression and learning will be encouraged.

**Key words : Inquiry, validity, survey, descriptive,**