

# SYLLABUS OF Ph.D. COURSEWORK



DEPARTMENT OF EDUCATION  
KAZI NAZRUL UNIVERSITY  
ASANSOL, WEST BENGAL, INDIA

# **Syllabus for Ph.D. Course Work**

## **Course PHDEDCC101: Advanced Research Methodology in Education**

**Marks: 100**

### **Learning Outcomes:**

After going through the course the students will be able to

- know various methods of educational research.
- carry out review of related literature
- know the process of data collection in educational research
- acquire competencies for analyzing the collected data in educational research
- Write the report of the research work

### **Unit – I: Introduction to Educational Research:**

1. **Educational Research:** Concept, Understanding, Objectives, and Ethics
2. **Research Method:** Experimental, Descriptive, Historical, Analytical, Survey, Normative – Survey.
3. **Research Problems:** Identification, Formulation and Statement.
4. **Research Question:** Hypotheses, and Variables – Concepts and types.

### **Unit – II: Review of Related Studies and Methodology:**

1. **Review of Related Studies:** Needs, Significance and Procedure.
2. **Sample and Sampling:** Population, Sample and Methods of Sampling (Probability and Non-probability), Sampling Design.
3. **Tools and Techniques of Research:** Process of Construction, Estimation of Reliability and Validity and Administration of Tools.

### **Unit – III: Analysis of Data: Quantitative and Qualitative Method**

1. **Research Design:** Types and Implications
2. **Descriptive Statistics** – Different Approaches.
3. **Inferential Statistics** – Different Approaches.

4. **Correlation Statistics** – Different Approaches.
5. **Factor Analysis** – Different Approaches.
6. **Logical and Descriptive Analysis.**

### **Unit – IV: Research Report:**

1. Writing of Research Proposal.
2. Writing of Research Report.
3. Reference Style.
4. Bibliography Style.
5. Appendices.

Note: Subject related to Research and Publication Ethics (RPE) is discussed and included as the part of research methodology.

### **Suggested Readings**

- Aggarwal, Y.P. (1998).***Statistical Methods*, New Delhi: Sterling Publishers Pvt. Ltd.
- Anfara, Vincent & Mertz Norma T. (2006).***Theoretical Frameworks in Qualitative Research*. SAGE Publication.
- Best J.W. and Kahn, J. V. (2006).***Research in Education*, 9th Ed. New Delhi: Pearson Education Inc.
- Borg, W.R. and Gall, M.D. (1983).***Educational Research – An Introduction*, New York, Longman, Inc.
- Creswell, J.W. (2002).***Educational Research Planning, Conducting and Evaluating Quantitative and Qualitative Research*. New Jersey: Merill Prentice Hall.
- Creswell, J. W. (2007).***Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. SAGE Publication.
- Denzin, N.K. and Lincoln, Y.S. (eds.) (1994).***Handbook of Qualitative Research*, Thousands Oaks, CA: Sage.
- Elhance, D.N. (1975).***Practical Problems in Statistics*. Allahabad: Kitab Mahal.
- Ellis, L. (1994).***Research Methods in Social Sciences*. Madison: Brown and Benchmark.
- Ferguson, G. A. (1959).***Statistical Analysis in Psychology and Education*, New York: McGraw-Hill Book Company.
- Garrett, H.E. (1981).***Statistic in Psychology and Education*, Bombay Vakils Feffer and Simons Ltd., India.
- Grbich, Carol (2006).***Qualitative Data Analysis: An Introduction*. SAGE Publication.
- Gupta, S. P. (1996).***Statistical Methods*, New Delhi: Sultan Chand & Sons.
- Hadin. C. (1987).***Research Design: Strategies and Choices in the Design of Social Research*. London: Allen and Unwin.
- Hamburg, M. (1979).***Basic Statistics: A Modern Approach*, (2nd Ed.). New York: Harcourt Brace.
- Healey, J.F. (2002).***Statistics: Tool for Social Research*, (6th ed.), Australia: Wadsworth.
- Johnson, P.O (1961).***Statistical Methods in Research*, New Jersey: Prentice Hall.
- Kaul, L. (1984).***Methodology of Educational Research*, New Delhi: Vikas Publications.
- Keevis, J. (1988).***Educational Research Methodology: An International Handbook*, Oxford: Pergamon.

- Kendall, G.M. (1982).***Dictionary of Statistical Terms*, London: Longman,
- Kerlinger, Fred N. (1973).***Foundation of Behavioural Research*, New York: Rinehart Winston.
- Kish, L (1967).***Survey Sampling*, New York: John Wiley.
- Korin, B.P. (1977).***Introduction to Statistical Methods*, Cambridge: Intrhrop Pub.
- Kothari, C.R. (1990).***Research Methodology: Methods and Techniques* (2nd Ed.). New Delhi: Vishwa Prakashan.
- Kurtz, A. K. (1980).***Statistical Methods in Education and Psychology*. New Delhi: Narosa Publication.
- Mangal, S.K. (2008).***Statistics in Education and Psychology*. New Delhi: Prentice-Hall of India Private Limited
- McCall, R. B. (1970).***Fundamental Statistics for Psychology*, New York: Harcourt Brace Jovanovich, Inc.
- Mertens, D. M. (1998).***Research Methods in Education and Psychology - Integrating Diversity with Quantitative & Qualitative Approaches*. New Delhi: Sage.
- Moser, C.A. (1958).***Survey Methods in Social Investigation*, London: Heimann Education Book Ltd.
- Salkind, N.J. (2006).***Exploring Research* (Sixth Edition) NJ: Pearson Prentice Hall.

## **Course PHDEDCC102 Application of Computer in Educational Research**

**Marks: 100**

### **Learning Outcomes:**

After going through the course the students will be able to

- Acquire fundamental knowledge of computers, its accessories, hardware and software.
- Find out the authentic sources of information related to educational research.
- Use software applications for data analysis in educational research.
- Use software applications for writing the thesis.

### **Unit – I: Basic Knowledge of Computer:**

1. Concept of Components of Computer (Hardware & Software).
2. Basic Knowledge of Computer Operation.
3. Basic Knowledge of Computer Application in Educational Research.

### **Unit – II: Internet Exploration:**

1. Browsing Internet and E-mailing.
2. Internet Resources for Research Papers and Thesis.
3. Evaluating Internet Resources: Authority, Accuracy and Objectivity.

4. UGC-infonet, INFLIBNET and ERNET.

### **Unit – III: Formatting and Analysis of Data:**

1. Creating Spreadsheet and Datasheet, Need of Spreadsheet, Creating, Opening & Saving Workbook, Editing Worksheet.
2. Introduction to Data Analysis Software Packages.
3. Data Analysis through Computer.

### **Unit – IV: Practical**

1. Use of Computer Programming in Educational Research –  
Practical works on – the preparation of papers articles monographs etc.

### **Suggested Readings**

**Babola, D. T. (1998).** *Microsoft World*. New Delhi: Prentice Hall of India Pvt. Ltd.

**Basandra, S. K. (2001).** *Computers Today*. New Delhi: Galgotia Publishers Pvt. Ltd.

**Diwan, P. (2001).** *Information System Management*. New Delhi: Pentagon Press.

**Dixit, M. (2003).** *Internet an Introduction*. New Delhi: Tata McGraw- Hill Publishing Company Ltd.

**Norton, P. (1999).** *Introduction to Computers* (3rd Ed.). Glencoe, New York, Woodland Hills, California, Peoria, Illinois: McGraw-Hill.

### **Course PHDEDCC201 Review of Related Studies**

**Marks: 100 (60 for Report & 40 for Viva)**

**( Report on the Review of Related Studies, Published or Unpublished Thesis Papers, Published Research Papers, Books on Published Research Studies, etc.)**

# - Report to be prepared on the Review of Related Research Studies (Published or Unpublished Thesis Papers, Published Research Papers, Books on Published Research Studies, etc.).

**Course PHDEDCC202 Advanced Area of Education ( Elective)**

**Marks: 100 ( 80 Theory + 20 Internal)**

\*Theoretical Discussion – Concepts, Theories, Propositions and Modern Trends

**(Four to be selected for each year)**

- 1 Philosophical Thoughts and Ideas and its new paradigm
- 2 Psychology of instruction and learning
- 3 A developmental theories of learning
- 4 A motivational theories of learning
- 5 Contemporary problems and issues in education
- 6 Modern trends of teacher education
- 7 History of primary, secondary, higher and teacher education
- 8 Modern trends of educational technology

- 9 Inclusive education
- 10 Analysis of teaching models
- 11 Needs and approaches of guidance and counseling
- 12 Curriculum studies – recent changes
- 13 Language education, different approaches and theories
- 14 Mathematics education, such as anxiety and phobia in mathematics
- 15 Progress, problems and prospects of SSA
- 16 Education for all
- 17 Science education, outreach programme
- 18 Book review and report on the review of studies
- 19 Problems of women education
- 20 Education for backward children
- 21 Education for minority girls
- 22 Problems of abnormal children
- 23 Lifestyle education
- 24 Education for humanity
- 25 Problems in primary, secondary and higher education
- 26 Comparative education
- 27 Education under different social systems  
etc

\*Note: Questions of Theory Paper to be set from each Topic with equal weightage.

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