

DESH BHAGAT UNIVERSITY, MANDI GOBINDGARH.

Faculty of Education

Ph.D. in Education

Program Outcomes

- **PO1. Educational Knowledge:** Apply the knowledge of foundational courses (Philosophy, Psychology, Sociology and Research etc), Pedagogical courses (Science, Mathematics, Social Studies, and Languages etc) and Specialization courses (Educational Administration & Management, Special Education, Adult Education, Guidance & Counselling, Educational Technology) to the solution of complex educational problems.
 - **PO2. Problem Analysis:** Identify, formulate, research literature, and analyze educational problems to arrive at substantiated conclusions using first principles of Foundational Courses, Pedagogical Courses and Specialization Courses.
 - **PO3. Design/Development of Solutions:** Design solutions for complex educational problems and design system components, processes to meet the specifications with consideration for the individual health and safety, and the cultural, societal, and environmental considerations.
 - **PO4. Conduct Investigations of Complex Problems:** Use research-based knowledge including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
 - **PO5. Modern Tool Usage:** Create, select, and apply appropriate techniques, resources, and modern educational and IT tools including training and teaching to complex educational activities with an understanding of the limitations.
 - **PO6. The Teacher and Society:** Apply reasoning informed by the contextual knowledge to assess societal, health, *safety*, *legal*, and cultural issues and the consequent responsibilities relevant to the professional educational practice.
 - **PO7. Environment and Sustainability:** Understand the impact of the professional educational solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
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- PO8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the educational practice.
- PO9. **Individual and Team Work:** Function effectively as an individual, and as a member or leader in teams, and in multidisciplinary settings.
- PO10. **Communication:** Communicate effectively with the educational community and with society at large. Be able to comprehend and write effective reports documentation. Make effective presentations, and give and receive clear instructions.
- PO11. **Administration, Management and Finance:** Demonstrate knowledge and understanding of educational and administrative principles and apply these to one's own work, as a member and leader in a team in multidisciplinary environments.
- PO12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of educational and technological change.

Paper-I

Course Code: MPHD-101

Title of Course: Research Methodology

CO1: Understand the academic theory and the preparation of high-quality research pertinent to the field.

CO2: Understand the current state of the art in the individual research area, and the ability to appropriately employ methods and existing research results in the development of new knowledge, theories and presentation of research in the individual research area.

CO3: Use knowledge in various aspects to identify research gaps and hence to provide solution to new ideas and innovations.

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| CO/PO Mapping |
| (S/M/W indicates strength of correlation) S – Strong, M – Medium, W – Weak |

| Cos | Programme Outcomes (Pos) | | | | | | | | | | | |
|-----|--------------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
| CO1 | S | S | W | M | W | M | W | M | W | M | M | S |
| CO2 | S | S | M | S | S | M | M | M | S | M | M | M |
| CO3 | S | S | M | S | S | M | W | W | S | M | S | S |

Course Content:

Section A

- Research: Definition, Meaning, Purpose, Types of Research, Significance of Research,
- Research Approaches: Quantitative & Qualitative,
- Parameters and Variables in Research,
- Identification, Selection and Formulation of Research Problem,
- Research Design: Meaning & Types.

Section B

- Sampling Theory: Types of Sampling, Steps in Sampling, Sampling & Non- Sampling errors, Determination of Sample Size.
- Data for Research, Primary and Secondary Data: Methods of data collection- Primary and Secondary Data.
- Data Processing, Editing, Coding, Quantitative and Qualitative Data, Analysis Techniques.

Section C

- Literature Review: Its need and significance in Research, Sources of Literature Review
APA & MLA styles of Thesis writing, Meaning of Bibliography/References, Plagiarism.
- Synopsis: Steps involved in writing synopsis, Norms and standards in writing Research Papers, Report writing, Pagination, Footnotes.

Section D

- Statistical Inferences: Estimation & Hypothesis Testing, Type I & Type II Error,
 - Parametric and Non Parametric Tests (Chi square test, z test, F test, Student t-test, Mann Whitney
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test, ANOVA (one way, two way),

- Computer Applications: MS Excel & SPSS for data analysis.

Recommended Books:

- 1 Kothari, CR, Research Methodology- Methods and Techniques, New Age International Publishers, New Delhi.
- 2 Dash, Priyranjan, Research M
- 3 Methodology with SPSS, Varinda Publications (P) Ltd.
- 4 Gupta, S.P Gupta, M.P. Business Statistics, Sultan Chnad & Sons
- 5 Chandan, J.S. Singh. J, Khanna, K.K. Business Statistics, Vikas Publishing House Pvt. Ltd.
- 6 Hooda, R.P. Statistics for Business and Economics, Macmillan India limited, New Delhi.

Paper-II

Course Code: MPHD-131

Title of Course: Education

Course Outcomes:

The course aims to shape the attitudes of learners regarding the field of education. The knowledge of Educational History, Aims, Content, Procedures, and Thoughts of great thinkers helps to analyze the philosophical reflections and develop the relationship between education and individual. Upon completion of this course, **the student will be able to:**

CO1: Realize the concepts and strategies underlying learner & learning

CO2: Examine the issues and concerns related to universalisation of higher education

CO3: Get acquaintance with Perspective of National Curriculum Framework for Teacher Education (NCFTE) 2009

CO4: Understand the policy perspectives on examinations and evaluation and their implementation practices

CO5: Traces the technology based practices and other trends at the international level

| CO/PO Mapping | | | | | | | | | | | | |
|---|--------------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| (S/M/W indicates strength of correlation) S – Strong, M – Medium, W – Weak | | | | | | | | | | | | |
| Cos | Programme Outcomes (Pos) | | | | | | | | | | | |
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
| CO1 | S | S | S | W | S | M | S | S | S | W | S | S |
| CO2 | S | M | S | S | M | S | S | S | W | M | S | S |
| CO3 | S | W | S | M | M | S | S | S | W | S | S | M |
| CO4 | S | S | M | S | S | S | M | M | M | S | S | M |
| CO5 | S | S | M | S | S | S | M | M | M | S | S | S |

Course Content:

Unit-I

The National Education Policies- formulation, Implementation and Financial supplementation- Right to Education

- Universalisation of Secondary Education- Rashtriya Madhyamik Siksha Abhijan (RMSA)
- Universalisation of Higher Education- Rashtriya Uchcharat Shiksha Abhiyan (RUSA)
- Education as an investment; Employability and life skills

Unit-II

- Education as an evolving concept- Behaviorist, Cognitivist and Constructivist Perspectives
 - Ideas of educational thinkers such as Krishnamurthy, Friere and Illich
 - The perspective of education for national development in the NCF-2005
 - Perspective of National Curriculum Framework for Teacher Education (NCFTE) 2009
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Unit III

Problems faced by adolescents - Suicides among students

- Continuous And Comprehensive Assessment
- Scoring Rubrics/ Performance Criteria, Grading System
- Inclusive Learning, Emotional and Spiritual Intelligence

Unit-IV

- Self learning- meaning, principles and Ways and means of promoting self-learning
- Problem-based Learning, Blended Learning, Computer Assisted Instructions (CAIs)
- e-Learning, Mobile learning, Open source and open content projects and Massively Open Online Courses (MOOC)
- ICT skills and competencies among teachers

Recommended Books

- 1 Agrawal, J.C. & Agrawal S.P. (1992). Role of UNESCO in Educational, Vikas Publishing House, Delhi.
 - 2 Anand, C.L. et.al. (1983). Teacher and Education in Emerging in Indian Society, NCERT, New Delhi.
 - 3 Butchvarov, P. (1970), *The Concept of Knowledge*, Evanston, Illinois: North Western University Press.
 - 4 Datta, D.M. (1972). *Six ways of Knowing*. Calcutta University Press, Calcutta.
 - 5 Dewey, John (1956). *The Child and the Curriculum and School and Society*, University of Chicago Press, Chicago, Illinois, U.S.A.
 - 6 Dewey, John. 'My Pedagogic Creed', in D.J. Flinders and S.J. Thorton(eds.) *The Curriculum Studies Reader*, Routledge: New York, 1997.
 - 7 Govt. of India (1986). National Policy on Education, Min. of HRD, New Delhi.
 - 8 Govt. of India (1992). Programme of Action (NPE). Min of HRD..
 - 9 Kumar Krishna (1996). *Learning From Conflict*, Orient Longman, New Delhi.
 - 10 Lakshmi, T.K.S. and M.S.Yadav, "Education: Its Evolving Characteristics", in *New Frontiers in Education*, Vol. XXII, No.4, Oct-Dec., 1992
 - 11 Margaret, K.T. *The open Classroom*, Orient Longman: New Delhi, 1999.
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- 12 Ministry of Education. *‘Education Commission “Kothari Commission”*. 1964-1966. Education and National Development. Ministry of Education, Government of India 1966.
- 13 Mukherji, S.M., (1966). *History of Education in India*, Acharya Book Depot, Baroda.
- 14 Naik, J.P. & Syed, N., (1974). *A Student’s History of Education in India*, MacMillan, New Delhi.
- 15 *National Policy on Education. 1986*. Ministry of HRD, Department of Education, New Delhi.
- 16 NCERT (1986). *School Education in India – Present Status and Future Needs*, New Delhi.
- 17 Prema Clarke (2001). *Teaching & Learning: The Culture of pedagogy*, Sage Publication, New Delhi.
- 18 Salamatullah, (1979). *Education in Social context*, NCERT, New Delhi.
- 19 Seventh All India School Education Survey, NCERT: New Delhi. 2002
- 20 Steven H. Cahn (1970). *The Philosophical Foundation of Education*, Harper & Row Publishers, New York.

Course Code: RPE
Course Name: Research Professional Ethics

Course Structure

The course comprises of six modules listed in table below. Each module has 4-5 units

| Modules | Unit title | Teaching hours |
|-----------------|---------------------------------|----------------|
| Theory | | |
| RPE-01 | Philosophy and Ethics | 3 |
| RPE-02 | Scientific conduct | 5 |
| RPE-03 | Publication Ethics | 7 |
| Practice | | |
| RPE-04 | Open Access Publishing | 4 |
| RPE-05 | Publication Misconduct | 4 |
| RPE-06 | Data Bases and Research Metrics | 7 |
| Total | | 30 |

RPE-01: Philosophy and Ethics (3)

1. Introduction to philosophy : Definition, nature and scope, concept, branches
2. Ethics: Definition, moral, philosophy, nature of morals, judgments and reactions

RPE-02: Scientific Conduct (5)

1. Ethics with respect to science and research
2. Intellectual honesty and research integrity
3. Scientific misconducts: Falsification, Fabrication and plagiarism (FFP)
4. Redundant publication: Duplicate and overlapping publications salami slicing
5. Selective reporting and misrepresentation of the data

RPE-03: Publication Ethics (7)

1. Publication Ethics: Definition, introduction and importance
2. Best practices/standard/setting initiatives and guidelines COPE, WAME, etc..
3. Conflicts of interest
4. Publication misconduct: Definition, concept, problems that lead to unethical behavior and Vice-Versa types
5. Violation of publication ethics, authorship and contribution ship
6. Identification of publication misconduct complaints and appeals
7. Predatory publishers and journals

Practice

RPE-04: Open Access Publishing (4)

1. Open access publication and imitative
2. SHERPA/RoMEO online resource to check publisher copyright and self archiving policies
3. Software tool to identify predatory publication developed by SPPU
4. Journal Finder/Journal Suggestion tools viz. JANE, Elsevier journal finder , Springe, Journal Suggester, etc

RPE-05: Publication Misconduct (4)

A. Group Discussion (2 hours)

1. Subject specific ethical issues, FFP, authorship
2. Conflicts of interest
3. Complaints and appeals example and fraud from India and abroad

B. Software tools (2 hours)

Use of plagiarism software like turnitin and urkund and open sources software tools

RPE-06: Data Bases and Research Metrics (7 hours)

A. Database (4hrs)

1. Indexing databases
 2. Citation databases: web of science Scopus etc.
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B. Research Metrics

1. Impact factor of journal as per journal, citation report, SNIP, IPP, CURE score
2. Matrix, H-index, G-index, i10 index altmetrics