Department of Adult & Continuing Education & Extension

Faculty of Social Sciences Jamia Millia

Islamia, New Delhi

Ph.D. DEVELOPMENT EXTENSION

COURSE WORK (Semester-1)

Syllabus as per NEP 2020 w.e.f. 2026

Ph.D. DEVELOPMENT EXTENSION

Course Work - Semester 1

(Effective from 2026)

S. No	Paper Code	Paper No.	Title of Paper	Marks			Credit
				*UE	*IA	TOTAL	
1.	PHD-DE-01	I	UNDERSTANDING DEVELOPMENT EXTENSION (IKS)	60	40	100	04
2.	PHD-DE-02	II	RESEARCH METHODS IN EXTENSION EDUCATION	60	40	100	04
3.	PHD-DE-03	III	TERM PAPER	30	20	50	02
4.	PHD-DE-04	IV	RESEARCH AND PUBLICATION ETHICS (RPE)	30	20	50	02
TOTAL						**300**	**12**

***IA: Internal Assessment**
***UE: University Examination**

Paper Code: PHD-DE-01

PAPER-I: UNDERSTANDING DEVELOPMENT EXTENSION

(04Credits/100Marks)

Objectives:

i) To understand the fundamentals of Development Extension and its scope.
ii) To examine major theories and approaches of development and extension.
iii) To analyze extension systems and emerging extension practices.
iv) To explore the role of institutions, partnerships, and ICTs in development.
v) To appreciate Indian Knowledge Systems and their relevance to sustainable development.

Contents:

Unit I: Introduction to Development Extension

1. Genesis and evolution of extension education.
2. Meaning, concept, objectives, philosophy, and principles of development extension.
3. Relationship between development extension and social sciences.
4. Changing dimensions of extension in the context of globalization

Unit II: Theories and Approaches of Development and Extension

1. Classical and contemporary theories of development: Adam Smith, Dependency, and Gandhian perspectives.
2. Development and diffusion theories: Amartya Sen, Everett Rogers, and Malthusian perspectives.
3. General, participatory, and cost-sharing approaches to extension.
4. Commodity-specialized and Training & Visit (T&V) approaches to extension.

Unit III: Extension Systems, Emerging Issues and Indian Knowledge Systems

1. Extension systems: types, structures, functions, and Indigenous Knowledge Systems (IKS).
2. Emerging extension issues: market-led extension, cyber extension, ICTs, BBE, privatization, and integration of traditional knowledge.
3. Public–Private Partnerships (PPP), indigenous institutions, and local governance in development.
4. Role of universities in teaching, research, extension, and promotion of Indigenous Knowledge Systems.

Books Recommended:

1	Blackburn, Donald. J.	*Foundations and Changing Practices in Extension.* Ontario, Canada: University of Guelph, 1989.
2	Dhama, O. P. & Bhatanagar, O.P.	*Education and Communication for Development,* New Delhi: Oxford and IBH Publishing Co. Pvt. Ltd., 1987
3	Dhiman, O.P.	*Foundations of Education: Philosophy and Sociology of Education*, Delhi: Atma Ram, 1987.
4	George H. Axim	*Guide on Alternative Extension Approaches. Rome: FAO,1988.*
5	James, G.E.	*Investing in Rural Extension: Strategies and Goals.* London & New York: Extension Applied Science Publishers, 1986.
6	Todaro, M. P., & Smith, S. C.	*Economic development (13th ed.).* Pearson. (2020).

Paper Code: PHD-DE-02

PAPER-II: RESEARCH METHODS IN EXTENSION EDUCATION

(04Credits/100Marks)

Objectives:

i) To acquaint the students with the methodology of conducting extension research

ii) To help students understand the construction and use of various data collection tools.

iii) To help them understand the use of various statistical techniques for analysing data.

iv) To develop a proper understanding of how to conduct good research

Contents:

Unit I: Foundation and Philosophical Perspective of research

1. Nature and scope of research in behavioral and social sciences: scientific inquiry, theory building and interdisciplinary research.
2. Research process: Identification and formulation of research problems, Review of literature, Development of objectives, research questions and hypotheses, Hypothesis formulation and testing, Population and sampling frame, Probability and non-probability sampling techniques, Sample size determination and representativeness.
3. Research Ethics and Publication: Principles of research ethics in the social and behavioural sciences; informed consent; confidentiality and responsible conduct of research; plagiarism and academic misconduct; citation and referencing practices; AI-assisted research and academic integrity.

Unit II: Qualitative Research Methodology

1. Foundations of Qualitative Research: Philosophical foundations and significance of qualitative research inquiry- interpretivist, constructivist and critical perspectives, characteristics and applications of qualitative research, ethical issues and reflexivity in qualitative studies.
2. Qualitative Research Designs and Mixed Method Approach: Ethnography, phenomenology, grounded theory and case study approaches, qualitative dimensions of mixed method research, integration of qualitative and quantitative data, applications of mixed method approach in social science research.
3. Methods and Tools of Data Collection in Qualitative Research: In-depth interviews and interview guide construction, observation methods and field-note preparation, Focus Group Discussion (FGD) techniques, digital and ICT-enabled qualitative data collection tools (Google Forms and worksheets).
4. Qualitative Data Analysis, Interpretation and Academic Writing: Coding, classification and thematic analysis of qualitative data, interpretation and presentation of qualitative findings, reliability, validity and trustworthiness in qualitative research, use of qualitative data analysis software such as NVivo, and ATLAS and, academic writing, citation, plagiarism, AI-assisted research and research ethics.

Unit III: Quantitative Research Methodology

1. Foundations of Quantitative Research: Nature, scope and significance of quantitative research, positivist approach and scientific method, variables and operationalisation, hypothesis formulation and testing, levels of measurement and scaling techniques.
2. Research Design and Sampling in Quantitative Research: Exploratory, descriptive, experimental and quasi-experimental research designs, cross-sectional and longitudinal studies, population, sampling frame and sample size estimation, probability and non-probability sampling techniques and representativeness.
3. Methods of Quantitative Data Collection and Processing: Survey method and questionnaire construction, classification, coding and tabulation of data, data management, ethical handling of research data and ICT-enabled quantitative data collection tools.
4. Statistical Analysis and Interpretation in Quantitative Research: Descriptive statistics, measures of central tendency and dispersion, correlation and regression analysis, parametric and non-parametric statistical tests, interpretation of statistical results and application of statistical software such as SPSS, R, Excel and spreadsheet-based analytical tools in research analysis.

Books Recommended:

1	Bogdan, R & Taylor, S.J.	*Introduction to Qualitative Research Methods,* New York: John Wiley & Sons,1975.
2	Edward. E. L.	*Techniques of Attitude Scale Construction,* Bombay, Vakil Publishers,1962.
3	Elhance. D.N.	*Fundamentals of Statistics,* Allahabad, Kitab Mahal, 1994.
4	Nachmias, David & Nachmias, Chava	*Research Methods in the Social Sciences,* New York: St. Martin's Press, 1981.
5	Filstead, W.J.	*Qualitative Methodology, First-hand Involvement with the Social World*. Chicago: Markham Publishing Co., 1970.
6	Rossi, P. H., Lipsey, M. W., & Henry, G. T.	*Evaluation: A systematic approach* (8th ed.). Sage Publications. (2018).

Paper Code: PHD-DE-03

PAPER-III: TERM PAPER

(02Credits/50Marks)

Objectives:

i) To help students learn to conceptualize an academic theme and build an argument round it.

ii) To help students look for relevant literature and review the same.

iii) To orient the students to the domain of professional writing.

iv) To help the students write a term paper and present and defend the same at the students' seminar.

Expected Outcomes:

The learner will be able to formulate a theme for the term paper which may be based on a primary research or review of the literature and other researches around the theme selected. The term paper is envisaged to help the student in finalizing her/his topic of proposed research, its design and methodology etc.

TERM PAPER (50 marks)

The term paper should be prepared and submitted by the student as per further detailed guidelines to be provided by the concerned supervisor. The broad structure will be in the following form:

a. Abstract of around 250 to 300 words

b. Key words: 5 to 8 keywords

c. Introduction

d. Literature review

e. Research methodology

f. Research findings

g. Conclusions

The term paper should normally be of around 5000 to 6000 words. The referencing of the term paper should be as per APA 7th edition format. Term paper will be evaluated by the PhD Supervisor.

EVALUATION

Term Paper: To be evaluated by the Ph.D. Supervisor.

Books Recommended:

1	Creswell, J. W., & Creswell, J. D.	*Research design: Qualitative, quantitative, and mixed methods approaches.* SAGE Publications. (6th ed., 2022).
2	Ray, G.L.	*Extension, Communication and Management*. Calcutta: Maya Prakashan, 1991.
3	Reddy, A.A.	*Extension Education.* Guntur: Sree Lakshmi Press, 1987.
4	Singh, Ranjit	*Textbook of Extension Education*. Ludhiana: Sahitya Kala Prakashan, 1987.
5	Supe, S.V.	*An Introduction to Extension Education*. New Delhi: Oxford and IBH Publishing Co. Pvt. Ltd., 1988.

Paper Code: PHD-DE-04

PAPER-IV: RESEARCH AND PUBLICATION ETHICS (RPE) (COMPULSORY PAPER)

(02Credits/50Marks)

Note: The teaching and examination of this paper shall be centralized and administered at the university level.

Objectives:

To help students gain awareness about the publication ethics and publication misconducts.

Overview:

This course has total 6 units focusing on basics of philosophy of science and ethics, research integrity, publication ethics. Hands-on- sessions are designed to identify research misconduct and predatory publications. Indexing and citation databases, open access publications, research metrics (Citations. H-index, Impact Factor, etc.) and plagiarism tools will be introduced in this course.

Pedagogy:

Classroom teaching, guest lectures, group discussions, and practical sessions.

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

Modules	**Unit Titles**
RPE-01	Philosophy and Ethics
RPE-02	Scientific Conduct
RPE-03	Publication Ethics
RPE-04	Open Access Publishing
RPE-05	Publication Misconduct
RPE-06	Databases and Research Metrics

COURSE OUTLINE:

THEORY

Unit I: PHILOSOPHY AND ETHICS

1. Introduction to Philosophy: definition, nature and scope, concept, branches
2. Ethics: definition, moral philosophy, nature of moral judgements and reactions

Unit II: SCIENTIFIC CONDUCT

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

Unit III: PUBLICATION ETHICS

1. Publication ethics: definition, introduction and importance
2. Best practices/standards 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 contributorship
6. Identification of publication misconduct, complaints and appeals
7. Predatory publishers and journals

PRACTICE

Unit IV: OPEN ACCESS PUBLISHING

1. Open access publications and initiatives
2. SHERPA/RoMEO online resource to check publisher copyright & self-archiving policies
3. Software tool to identify predatory publications developed by SPPU
4. Journal finder/journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer Journal Suggester, etc.

Unit V: PUBLICATION MISCONDUCT

A. Group Discussions (2 hrs.)

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

B. Software tools

Use of plagiarism software like Turnitin, Urkund and other open-source software tools

Unit VI: DATABASES AND RESEARCH METRICS

A. Databases

1. Indexing databases
2. Citation databases: Web of Science, Scopus, etc.

B. Research Metrics

1. Impact Factor of journal as per Journal Citation Report, SNIP, SJR, IPP, Cite Score
2. Metrics: h-index, g index, i10 index, altmetrics

References

1	Beall, J. (2012).	*Predatory publishers are corrupting open access,* Nature, 489 (7415), 179-179 http://doi.org/10.1038/489179a
2	Bird, A. (2006).	*Philosophy of Science.* Routledge.
3	Indian National Science Academy (INSA). (2019).	*Ethics in Science Education, Research and Governance,* ISBN:978-81-939482-1-7. http://www.insaindia.res.in/pdf/Ethics_Book.pdf
4	MacIntyre, Alasdair (1967).	*A Short History of Ethics.* London.
5	National Academy of Sciences, National Academy of Engineering and Institute of Medicine. (2009).	*On Being a Scientist; A Guide to Responsible Conduct in Research:* Third Edition. National Academies Press.
6	P. Chaddah, (2018).	*Ethics in Competitive Research: Do not get scooped; do not get plagiarized,* ISBN:978-9387480865
7	Resnik, D. B. (2011).	*What is ethics in research & why is it important.* National Institute of Environmental Health Sciences. Retrieved from https://www.niehs.nih.gov/research/resources/bioethics/whatis/index.cfm