Re-Accredited 'B++' 2.86 CGPA by NAAC
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વીર નર્મદ દક્ષિણ ગુજરાત યુનિવર્સિટી
યુનિવર્સિટી કેમ્પસ, ઉધના-મગદલ્લા રોડ, સુરત - ૩૯૫ ૦૦૭, ગુજરાત, ભારત.
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ક્રમાંક: ઓથો./પરિપત્ર/૧૩૬૭૬/૨૦૨૬
તા.૨૩–૦૬–૨૦૨૬

પ્રતિ,
વડાશ્રી,
માનવ સંશાધન વિભાગ,
વીર નર્મદ દક્ષિણ ગુજરાત યુનિવર્સિટી,
સુરત.

વિષય :– NEP- 2020 અંતર્ગત Post Graduate Diploma in Research Methodology નો સેમેસ્ટર–૧ અને ૨ ના અભ્યાસક્રમ બાબત.

સુજ્ઞશ્રી,

સવિનય જણાવવાનું કે, શૈક્ષણિક વર્ષ ૨૦૨૬–૨૭ થી અમલમાં આવનાર NEP-2020 અંતર્ગત Post Graduate Diploma in Research Methodology નો અભ્યાસક્રમ અંગે રીસર્ચ મેથોડોલોજી વિષયની નિયૂક્ત એડહોક બોર્ડની તા.૨૩/૦૩/૨૦૨૬ની સભાનાં ઠરાવ ક્રમાંક: ૧ થી કરેલ ભલામણ સ્વીકારી વિનયન વિદ્યાશાખાની તા.૧૦/૦૬/૨૦૨૬ની સભાનાં ઠરાવ ક્રમાંક:૦૯ થી કરેલ ભલામણ સ્વીકારી એકેડેમિક કાઉન્સિલની તા.૧૮/૬/૨૦૨૬ની સભાનાં ઠરાવ ક્રમાંક: ૫૧ થી મંજુર કરેલ છે. જેનો અમલ કરવા આથી જાણ કરવામાં આવે છે.

બિડાણ: ઉપર મુજબ

કુલસચિવશ્રી

પ્રતિ,
૧) ડીનશ્રી, વિનયન વિદ્યાશાખા.
૨) પરીક્ષા નિયામકશ્રી, પરીક્ષા વિભાગ, વીર નર્મદ દ. ગુ. યુનિવર્સિટી, સુરત.
.....તરફ જાણ તેમજ અમલ સારૂ.

Post Graduate Diploma Research Methodology

Department of Human Resource Development VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT	
Name of Program	**Post Graduate Diploma Research Methodology**
Program Abbreviation	**PGDRM**
Duration	**1 Year**
Eligibility Criteria	**Any Graduation from recognized University**
Pre-requisite	**NIL**
Medium of Instruction	**English**
Objective of Program	The objective of the Post Graduate Diploma in Research Methodology (PGDRM) is to develop a strong foundation in research concepts, scientific inquiry, and methodological approaches; to enable learners to identify research problems and formulate clear objectives and hypotheses; to equip students with qualitative, quantitative, and mixed research design skills; to provide training in data collection, statistical analysis, and interpretation using appropriate tools; to enhance critical thinking and analytical abilities for evaluating literature and empirical findings; to promote ethical research practices and academic integrity; to develop academic writing and communication skills for reports and publications; and to prepare learners for independent research, interdisciplinary applications, and lifelong learning.
Total Credits	**44**
Program Outcome (PO)	**PO2 – Problem Identification** Identify research gaps, formulate research problems, and develop clear research objectives. **PO3 – Research Design**

	Design appropriate qualitative, quantitative, and mixed-method research frameworks. **PO4 – Data Collection Skills** Apply suitable tools and techniques for primary and secondary data collection. **PO5 – Statistical & Analytical Skills** Use statistical tools and software (e.g., SPSS, Excel, R) for data analysis and interpretation. **PO6 – Critical Thinking** Critically evaluate literature, theories, and empirical findings to support research arguments. **PO7 – Ethical Research Practice** Adhere to research ethics, plagiarism norms, and academic integrity. **PO8 – Academic Writing & Communication** Prepare research proposals, reports, and papers with clarity and scientific rigor. **PO9 – ICT & Digital Competence** Utilize digital tools, databases, and reference management software (e.g., Zotero, Mendeley). **PO10 – Interdisciplinary Application** Apply research skills across diverse academic and professional domains. **PO11 – Independent Research Capability** Conduct independent research and contribute to knowledge creation. **PO12 – Lifelong Learning** Develop continuous learning attitude for academic and professional growth.
Program Specific Outcomes (PSO)	**PSO1 – Proposal Development** Design and present a complete research proposal including problem statement, objectives, hypothesis, and methodology. **PSO2 – Tool Construction** Develop and validate research instruments such as questionnaires, interview schedules, and observation tools. **PSO3 – Advanced Data Analysis** Perform advanced statistical analysis (e.g., regression, ANOVA, correlation) using software tools. **PSO4 – Literature Review Mastery** Conduct systematic literature review using databases like Scopus, Web of Science, and Google Scholar. **PSO5 – Academic Publication Skills** Prepare research papers suitable for publication in peer-reviewed journals. **PSO6 – Field Research Competence** Execute fieldwork effectively, including sampling techniques and data handling. **PSO7 – Research Ethics Compliance** Apply ethical standards including informed consent, confidentiality, and plagiarism avoidance. **PSO8 – Dissertation Writing** Complete a mini-dissertation or project report using standard academic formats (APA/MLA etc.).

Mapping between POS and PSOs

POs \ PSOs	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	**PSO6**	**PSO7**	**PSO8**
PO1 Research Knowledge	3	2	2	3	2	2	2	2
PO2 Problem Identification	3	2	1	3	2	2	1	2
PO3 Research Design	3	3	2	2	2	3	2	3
PO4 Data Collection	2	3	2	1	1	3	2	2
PO5 Statistical Skills	1	1	3	1	2	2	1	2
PO6 Critical Thinking	2	2	2	3	3	2	2	3
PO7 Ethics	2	2	1	2	2	2	3	3
PO8 Writing Skills	3	2	2	3	3	2	2	3
PO9 ICT Skills	2	2	3	3	2	2	1	2
PO10 Interdisciplinary	2	1	2	2	2	2	1	2
PO11 Independent Research	3	2	3	3	3	3	2	3
PO12 Lifelong Learning	2	1	2	2	2	2	2	2

Semester-I																
Course Code	**Course Title**	**Mark sheet Title in English**	**Level of Course**	**Teaching Hours/ Week**		**Exam Duration**		**Credit**		**Internal Marks (50)**			**External Marks**		**Total**	
				TH	**PR**	**TH**	**Internal**	**TH**	**PR**	**Internal test**	**Assignment/ Viva Voce/Presentation**	**Attendance / Publication**	**TH**	**PR**	**TH**	**PR**
PGD-R-1	Foundations of Social Science Research	Foundations of Social Science Research	Core	4	NIL	2 hrs	1 hour	4	NIL	30	10	10	50	NIL	100	NIL
PGD-R-2	Research Design and Methods	Research Design and Methods	Core	4	NIL	2 hrs	1 hour	4	NIL	30	10	10	50	NIL	100	NIL
PGD-R-3	Quantitative Research Methods and Statistics	Quantitative Research Methods and Statistics	Core	4	NIL	2 hrs	1 hour	4	NIL	30	10	10	50	NIL	100	NIL
PGD-R-4	Qualitative Research Methods	Qualitative Research Methods	Core	4	NIL	2 hrs	1 hour	4	NIL	30	10	10	50	NIL	100	NIL
PGD-R-5	Research Ethics, Integrity and Academic Writing	Research Ethics, Integrity and Academic Writing	Core	4	NIL	2 hrs	1 hour	4	NIL	30	10	10	50	NIL	100	NIL

Semester-II																
Course Code	**Course Title**	**Mark sheet Title in English**	**Level of Course**	**Teaching Hours/ Week**		**Exam Duration**		**Credit**		**Internal Marks (50)**			**External Marks**		**Total**	
				TH	**PR**	**TH**	**Internal**	**TH**	**PR**	**Internal test**	**Assignment/ Viva Voce**	**Attendance / Participation**	**TH**	**PR**	**TH**	**PR**
PGD-R-6	Data Analytics and Digital Tools	Data Analytics and Digital Tools	Core	4	NIL	2 hrs	1 hour	4	NIL	30	10	10	50	NIL	100	NIL
PGD-R-7	Research Proposal, Funding & Publication	Research Proposal, Funding & Publication	Core	4	NIL	2 hrs	1 hour	4	NIL	30	10	10	50	NIL	100	NIL
PGD-R-8	Dissertation and Viva-voce	Dissertation and Viva-voce	Core	NIL				16		200			200		400	

SEMESTER -I

Paper 1: Foundations of Social Science Research

Course Outcomes (COs)

After successful completion, the learner will be able to:

CO Code	Course Outcomes	Bloom's Level
CO1.1	Explain the nature, scope, and purpose of social science research	Understand
CO1.2	Compare major research paradigms and philosophical traditions	Analyze
CO1.3	Relate theory, concepts, and variables in research frameworks	Apply
CO1.4	Evaluate interdisciplinary and Indian Knowledge System approaches	Evaluate

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Unit I: Nature and Scope of Research (8 Hours)

- Meaning, objectives, and characteristics of research
- Scientific inquiry in social sciences
- Types of research: Basic, Applied, Action, Evaluation
- Research and social development
- Role of research in policy and governance

Unit II: Research Philosophy and Paradigms (8 Hours)

- Ontology, epistemology, and axiology
- Positivism, Post-positivism
- Interpretivism and Constructivism
- Critical theory and Pragmatism
- Paradigm choice in social science research

Unit III: Theory and Conceptual Frameworks (8 Hours)

- Theory: meaning, functions, and types
- Conceptualization and operationalization
- Variables and constructs
- Hypotheses and propositions
- Model building and framework development

Unit IV: Interdisciplinary and Indian Knowledge Systems (8 Hours)

- Interdisciplinary and transdisciplinary research
- Indian research traditions

- Indigenous methods and knowledge systems
- Ethical pluralism and contextual research
- Decolonizing social science research

Unit V: Contemporary Issues in Social Science Research (8 Hours)

- Globalization and research challenges
- Gender, inclusion, and diversity
- Sustainability and environmental research
- Technology and society
- Future of social science research

Reference Books:

1. **Research Methodology: Methods and Techniques** – C.R. Kothari
2. **The Research Process** – John W. Creswell
3. **Social Research Methods** – Alan Bryman
4. **An Introduction to Social Research** – Keith Punch
5. **Indian Epistemologies** – B.N. Patel (Ed.)

Paper 2: Research Design and Methods

CO Code	Course Outcomes	Bloom's Level
CO2.1	Identify research problems and formulate objectives and hypotheses	Analyze
CO2.2	Select appropriate research designs and sampling techniques	Apply
CO2.3	Develop valid measurement tools and scales	Create
CO2.4	Prepare a structured research proposal	Create

Unit I: Research Problem Identification (8 Hours)

- Sources of research problems
- Problem formulation and justification
- Research questions and objectives
- Hypotheses formulation
- Scope and delimitations

Unit II: Research Designs (8 Hours)

- Exploratory, descriptive, and causal designs
- Experimental and quasi-experimental designs
- Cross-sectional and longitudinal studies
- Case study design
- Field and survey research

Unit III: Sampling Design (8 Hours)

- Population and sampling frame
- Probability sampling methods
- Non-probability sampling methods
- Sample size determination
- Sampling errors and bias

Unit IV: Measurement and Instrument Design (8 Hours)

- Measurement concepts and scales
- Questionnaire and interview schedules
- Reliability and validity
- Pilot studies
- Instrument standardization

Unit V: Fieldwork Planning and Proposal Writing (8 Hours)

- Fieldwork ethics and logistics
- Data collection strategies
- Time and cost planning
- Research proposal structure
- Review and refinement of proposals

Reference Books:

1. **Research Design** – John W. Creswell
2. **Designing Social Research** – Norman Blaikie
3. **Business Research Methods** – Cooper & Schindler
4. **Qualitative Inquiry and Research Design** – Creswell & Poth
5. **Research Methodology** – R. Paneerselvam

Paper 3: Quantitative Research Methods and Statistics

CO Code	Course Outcomes	Bloom's Level
CO3.1	Describe types of data and statistical measures	Understand
CO3.2	Apply descriptive and inferential statistics to datasets	Apply
CO3.3	Analyze relationships using regression and correlation	Analyze
CO3.4	Interpret statistical results for research decisions	Evaluate

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Unit I: Data and Measurement (8 Hours)

- Types and sources of data
- Levels of measurement
- Data coding and tabulation
- Data cleaning
- Missing data treatment

Unit II: Descriptive Statistics (8 Hours)

- Frequency distributions
- Measures of central tendency
- Measures of dispersion
- Graphical representation
- Interpretation of descriptive results

Unit III: Inferential Statistics (8 Hours)

- Probability and sampling distributions
- Hypothesis testing
- t-test, z-test
- Chi-square test
- ANOVA

Unit IV: Correlation and Regression (8 Hours)

- Correlation analysis
- Simple linear regression
- Multiple regression
- Assumptions and diagnostics
- Interpretation of results

Unit V: Statistical Software Applications (8 Hours)

- Introduction to SPSS / R / Excel
- Data entry and management
- Statistical analysis using software
- Output interpretation
- Reporting quantitative results

Reference Books:

1. **Statistical Methods** – S.P. Gupta
2. **Fundamentals of Mathematical Statistics** – S.C. Gupta & V.K. Kapoor
3. **Statistics for Social Sciences** – Heiman
4. **Using SPSS for Windows** – Julie Pallant
5. **Discovering Statistics Using IBM SPSS** – Andy Field

Paper 4: Qualitative Research Methods

CO Code	Course Outcomes	Bloom's Level
CO4.1	Explain philosophical foundations of qualitative inquiry	Understand
CO4.2	Conduct interviews, FGDs, and observations	Apply
CO4.3	Analyze qualitative data using coding and thematic analysis	Analyze
CO4.4	Assess trustworthiness and reflexivity in qualitative research	Evaluate

Unit I: Foundations of Qualitative Research (8 Hours)

- Nature and characteristics
- Qualitative paradigms
- Role of researcher
- Reflexivity
- Ethics in qualitative research

Unit II: Qualitative Research Designs (8 Hours)

- Case study
- Ethnography
- Phenomenology
- Narrative inquiry
- Grounded theory

Unit III: Data Collection Techniques (8 Hours)

- In-depth interviews
- Focus group discussions
- Observation methods
- Document analysis
- Field notes and memos

Unit IV: Qualitative Data Analysis (8 Hours)

- Transcription techniques
- Coding processes
- Thematic analysis
- Content analysis
- Narrative analysis

Unit V: Trustworthiness and Reporting (8 Hours)

- Credibility, transferability

- Dependability and confirmability
- Triangulation
- Writing qualitative reports
- Ethical representation of voices

Reference Books:

1. **Qualitative Research Design** – Joseph A. Maxwell
2. **The Coding Manual for Qualitative Researchers** – Johnny Saldaña
3. **Doing Qualitative Data Analysis in Education** – Saldaña & Omasta
4. **Qualitative Inquiry and Research Design** – Creswell & Poth
5. **Interpretive Social Science** – Norman Denzin

Paper 5: Research and Publication Ethics

CO Code	Course Outcomes	Bloom's Level
CO5.1	Explain ethical principles and research integrity norms	Understand
CO5.2	Detect plagiarism and unethical practices	Analyze
CO5.3	Apply citation styles and referencing tools	Apply
CO5.4	Critique academic manuscripts ethically	Evaluate

THEORY

RPE 01: PHILOSOPHY AND ETHICS

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

RPE 02: SCIENTIFICCONDUCT

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

RPE 03: 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

RPE 04: 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.

RPE 05: PUBLICATION MISCONDUCT

A. Group Discussions
    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

RPE 06: 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

ACADEMIC WRITING SKILLS

1. Structure of academic papers
2. Writing literature reviews
3. Argumentation and coherence
4. Avoiding bias and ambiguity
5. Editing and proofreading

Reference Books:

1. **Publication Manual of the American Psychological Association** – APA
2. **Ethics in Social Science Research** – Mark Israel & Iain Hay
3. **Academic Writing for Graduate Students** – Swales & Feak
4. **Doing Your Research Project** – Judith Bell
5. **Plagiarism and Academic Integrity** – UGC Publications

SEMESTER II

Paper 6: Data Analytics, Digital Tools & AI in Research

CO Code	Course Outcomes	Bloom's Level
CO6.1	Explain concepts of data analytics and digital research tools	Understand
CO6.2	Apply visualization and bibliometric techniques	Apply
CO6.3	Analyze research trends using AI-assisted tools	Analyze
CO6.4	Assess ethical implications of AI in research	Evaluate

Unit I: Digital Research Ecosystem (8 Hours)

- Digital data sources
- Online surveys
- Social media research
- Web-based data collection
- Data ethics and privacy

Unit II: Data Visualization and Analytics (8 Hours)

- Principles of data visualization
- Charts, graphs, dashboards
- Exploratory data analysis
- Storytelling with data
- Visualization tools

Unit III: Bibliometrics and Scientometrics (8 Hours)

- Citation analysis
- Impact factor and h-index
- Research mapping
- Systematic literature review
- Meta-analysis basics

Unit IV: AI and Emerging Technologies in Research (8 Hours)

- AI applications in research
- Machine learning basics
- Natural language processing
- AI-assisted literature review
- Ethical issues in AI use

Unit V: Open Science and Research Reproducibility (8 Hours)

- Open data and open access
- Research transparency
- Pre-registration of studies
- Reproducible research
- Future trends in digital research

Reference Books:

1. **Doing Digital Methods** – Richard Rogers
2. **The SAGE Handbook of Social Media Research Methods** – Sloan & Quan-Haase (Eds.)
3. **Big Data in Social Science** – Foster et al.
4. **Artificial Intelligence Basics** – Tom Taulli
5. **Open Science by Design** – National Academies

Paper 7: Research Proposal, Funding & Publication

CO Code	Course Outcomes	Bloom's Level
CO7.1	Identify funding agencies and publication outlets	Understand
CO7.2	Prepare fundable research proposals	Create
CO7.3	Develop manuscripts for peer-reviewed journals	Create
CO7.4	Evaluate journal quality and publication ethics	Evaluate

Unit I: Research Proposal Development (8 Hours)

- Components of research proposals
- Problem statement and objectives
- Literature review integration
- Methodology and timelines
- Budget preparation

Unit II: Research Funding Landscape (8 Hours)

- National funding agencies
- International funding agencies
- Grant application procedures
- Ethics and compliance
- Financial reporting

Unit III: Academic Publishing Process (8 Hours)

- Types of journals
- Journal selection criteria
- Manuscript preparation
- Submission and review
- Responding to reviewers

Unit IV: Research Impact and Visibility (8 Hours)

- Citation strategies
- Academic networking
- Research profiles (ORCID, etc.)
- Policy briefs and reports
- Societal impact of research

Unit V: Predatory Practices and Publication Ethics (8 Hours)

- Identifying predatory journals

- Ethical authorship
- Data sharing norms
- Retractions and corrections
- Responsible dissemination

Reference Books:

1. **The Craft of Research** – Booth, Colomb & Williams
2. **How to Write a Lot** – Paul J. Silvia
3. **Getting Research Published** – Beth Luey
4. **Writing Successful Grant Proposals** – Otto O. Kyle
5. **Predatory Publishing** – Jeffrey Beall

Paper - 8: Dissertation

CO Code	Course Outcomes	Bloom's Level
COD1	Design and conduct independent empirical research	Create
COD2	Analyze and interpret primary/secondary data	Analyze
COD3	Produce a dissertation adhering to academic standards	Create
COD4	Defend research outcomes through viva-voce	Evaluate

Nature of the Dissertation

The project may be **any one** of the following:

- Empirical research (quantitative / qualitative / mixed methods)
- Policy analysis or evaluation study
- Industry / NGO / institutional research dissertation
- Field-based social research
- Internship-based research with analytical dissertation

Project Duration: Minimum 8 weeks

Assessment and Evaluation

Evaluation will be based on:

- Project proposal quality
- Research design and methodology
- Data analysis and interpretation
- Originality and critical thinking
- Dissertation writing and presentation
- Viva-voce performance

Weightage:

- Dissertation: 50% -200 Marks
- Viva-Voce: 50% - 200 Marks