

Children's University

Gandhinagar



CERTIFICATE COURSE:

Research Methodology in Social Science

Year: 2021-22

School of Accreditation and Quality Enhancement

Children's University
Gandhinagar – 382020 Gujarat (India)
Website: www.cugujarat.ac.in

EXCELLENCE IN HIGHER EDUCATION

Courses	Code	Credits	Total Hours
Subject-1	RMST-1	3	48
Subject-2	RMST-2	3	48
Practical work	RMSP-3	6	192
Total		12	288

Credits – 3**Marks: 50****Learners will be able to:**

1. develop insight in identification of research problem and preparation of research proposal
2. develop scientific aptitude and rational attitude towards solving a problem
3. develop insight into different methods of research useful in solving educational problem
4. develop understanding to apply different types of research tools and techniques
5. get acquainted with the skill in applying statistical techniques for data analysis
6. acquire the use of computer for data analysis

RESEARCH METHODOLOGY**COURSE CODE: RMST-1****Credits – 3****Hours: 48****Marks: 50****SCHEME OF TEACHING AND ASSESMENT:**

Unit	Content	Weightage		Suggested Methodology
		Total Hours	Percentage	
1	Unit: -1 Introduction to Educational Research and Hypothesis 1.1 Definition, concept and characteristics of Research 1.2 Research proposal construction 1.3 Research process 1.4 The Hypothesis: Concept, Construction of different types of Hypotheses and Testing of Hypothesis	10	20	Discussion, Lecture cum Narration, Supervised study method
2	UNIT: 2 Methods of Educational Research 2.1 Descriptive Research: Meaning, Steps, Types 2.2 Experimental Research: Meaning, characteristics, Principles Threats to experimental Research Types of Experimental Designs 2.3 Qualitative and Quantitative Research Concept of Ethnographic Research, meaning and steps of Delphi technique in qualitative research, Content analysis: concept, characteristics, steps	10	20	Lecture, Question Answer. Problem Pair Presentation
3	Unit: 3 Sampling 3.1 Concept of Population and sample and sampling process 3.2 Characteristics of a Good Sample 3.3 Non-Probability Sampling: Purposive, convenient, Judgment, quota, Snowball 3.4 Probability Sampling: Simple Random,	10	20	Narration, Brain Storming, One minute paper

	Stratified, Cluster, Multistage, Systematic 3.5 Sampling Error and ways to reduce them			
4	Unit : 4 Tools and Techniques of Data Collection 4.1 Techniques of measurement: Attitude scale: Meaning, Classification Method of Likert scale 4.2 Classifications of tests: Meaning, Steps of Construction of objective type Test, Basic characteristics of a standardized testsuch as norms, reliability and validity 4.3 Techniques of Data Collection: Interview- Meaning, types, procedure,advantages and limitations. Observation- Meaning, types, procedure, Advantages and limitations.	18	40	Panel Discussion, Lecturing, Demonstration
TOTAL		48	100%	

OBJECTIVE – WISE DISTRIBUTION OF WEIGHTAGE (%)

Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation	TOTAL
5	10	20	15	15	35	100

DATA ANALYSIS IN RESEARCH

COURSE CODE: RMST-2

Credits – 3

Hours: 48

Marks: 50

SCHEME OF TEACHING AND ASSESMENT:

Unit	Content	Weightage (100%)		Suggested Methodology
		Total Hours	Percentage	
1	UNIT:1 Nature of Data & Measures of Relative Position and Relationship 1.1 Parametric and Nonparametric Data- Basic Assumptions, limitations, advantages 1.2 Normal Probability curve: Characteristics, Limitations 1.3 Measures of Relative Position: Z score, T score, Percentile Rank 1.4 Measures of Relationship: Product-Moment Correlation, Rank Correlation 1.5 Theoretical Concept of Biserial, Point Biserial, Tetra choric, Phi, Partial and	14	30	Narration cum discussion, Question answer method
2	UNIT:2 Inferential Data Analysis and Interpretation 2.1 The Significance of the Difference between two Means 2.2 Significance of difference between two Correlations 2.3 Decision Making: Concept of Two-Tailed and One-Tailed Tests of Significance, type-1 and type-1 error and Degrees of Freedom 2.4 Analysis of Variance- and co variance (only theoretical concept)	14	30	Discussion, Lecture, Brain Storming
3	Unit :3 Nonparametric Tests 3.1 The Chi Square Test for large sample: Equal Probability, Normal Probability 3.2 Kendal's T and W test 3.3 Mann Whitney U test 3.4 Kruskal –Valis H test	10	20	Discussion and Lectures

4	Unit : 4 Computer in Data Analysis 4.1 Brief introduction of different computer application software for data analysis 4.2 M.S. EXCEL – Different Statistical Functions and formulae used for statistical data analysis	10	20	Theory lectures Practical work
TOTAL		48	100%	

OBJECTIVE – WISE DISTRIBUTION OF WEIGHTAGE (%)

Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation	TOTAL
5	10	20	35	15	15	100

Credits – 6

Hours: 192

Marks: 100

COURSE CODE: RMSP-3

PRACTICALS: (Any two)

1. Prepare a research proposal following the all steps
2. Take hypothetical data and carryout item analysis for construction of a Likert type scale.
3. Take hypothetical data and carryout item analysis for construction Objective type test of MCQ nature.
4. Calculate t or r values for a sample data
5. Write Null, Directional & Non-Directional hypothesis. Make five hypotheses for calculation of correlation and five for difference between mean scores. Take hypothetical data and write data analysis for the same.

REFERENCES:

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6. Gupta, S. (2005), Research Methodology and Statistical Techniques, New Delhi: Deep and Deep Publication
7. Kerlinger, F.N. (2007), Foundations of Behavioural Research (10nd Edn.) Delhi : Surjeet Publications.
8. Koul, L (2002), Methodology of Educational Research (3rd Edn), New Delhi : Vikas Publishing

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