

**MANAGED BY JIVAN JYOT TRUST
J.Z SHAH ARTS & H. P. DESAI
COMMERCE COLLEGE,
AMROLI-SURAT.**

Re-Accredited B++ (CGPA 2.94) BY NAAC (3rd Cycle)

Affiliated To Veer Narmad South Gujarat University, Surat



**Certificate Course on
“RESEARCH METHODOLOGY”
(CCRM)**

Total Hours: 30 Hrs.



Values

Integrity, transparency, accountability and credibility are the values we cherish and adhere to in all aspects of dealings with our Students.

Mission

To provide executive coaching and soft skills training in enhancing professionalism which act as a stepping stone and pave the path for a bright future.

**Annexure -1 Course Syllabus
Proposal of the Certificate Course
Certificate Course on Research Methodology (CCRM)**

Objective of the Course:	The course is aimed at providing the knowledge of conducting research projects and building themselves in the field of Research for the students who have completed their graduation in faculty of commerce & Arts and who are presently enrolled in Masters of Arts and Masters of Commerce Faculty.
Pre-requisite:	Those who have had no previous exposure to Research and Research Methodology.
Expected Outcomes of the Course:	<p>Discuss different methodologies and techniques used in research work.</p> <ul style="list-style-type: none"> • Demonstrate the ability to choose methods appropriate to research aims and objectives. • Develop skills in qualitative and quantitative data analysis and presentation. • Develop advanced critical thinking skills. • Get the basic skill for the conduct of research. • Will get the Analytical Skill to conduct the research.



Details Proposal Course Schedule

Unit No.	Module to be Covered	30 Hours
Unit 1	Introduction to Research Methodology: <ul style="list-style-type: none"> • Meaning, Objective, Motivation of Research • Type of Research, Significance of Research • Research Methods versus Methodology • Research Process, Criteria of Good Research • Defining the Research Problem 	4 Hours
Unit 2	Experimental Design: <ul style="list-style-type: none"> • Basic Principles – Randomization, Replication, Local Control • Informal Experimental Design – Before and After Without Control, after with control, before and after with control • Formal Experimental Design – Completely Randomized, Randomized Block, Latin Square. • Sampling Design – Sampling Procedure, Characteristic of good sample design • Different type of sampling design – Probability and Nonprobability 	4 Hours
Unit- 3	Data Collection Techniques <ul style="list-style-type: none"> • Primary and Secondary Data • Direct and Indirect Investigation and Techniques • Essential of Good Questionnaire • Different Between Survey and Experiments 	4 Hours
Unit- 4	Sampling Fundamentals <ul style="list-style-type: none"> • Need of Sampling, Terms in Sampling – Population, Sampling Frame, Sampling Design, Statistics and Parameter, Sampling Error, Precision • Confidence & Significance Level – Sampling Distribution, Standard Error, Estimation for Population Mean and Proportion • Ethical Issues in Research, Writing and presenting Research Report • Role of Computer in Research 	4 Hours
Unit- 5	Testing Hypothesis – Large Sample Test and Small Sample Test <ul style="list-style-type: none"> • Definition of Hypothesis, Concept of Hypothesis – Null and Alternative Hypothesis • Level of Significance, Type I & II error, One Tailed and Two Tailed Test • Power of test, Testing of Mean, testing of difference between two mean, testing of proportion & difference between two proportion. • Degree of Freedom 	4 Hours




	<ul style="list-style-type: none"> Significance testing based upon T Statistic and F Statistic- Testing of Mean, testing of difference between two mean, testing equity of variance 	
Unit- 6	Chi-square test and Analysis of Variance <ul style="list-style-type: none"> Definition of Chi-square, Chi-square test and goodness of fit and as a test of independence Correlation and its application Analysis of Variance (ANOVA) – Concept, One Way ANOVA, ANOVA test in Latin square design Idea of Non Parametric Test, Sign Test, McNemer change test, Wilcoxon matched pair test, One sample run test 	4 Hours
Unit-7	Practical/Project/Field Work	6 Hours

References:

1. Research Methodology Edition II, C R Kothari
2. Introducing Research Methodology: A Beginner's Guide to Doing a Research Project. Uwe Flick
3. Research Design: Qualitative, Quantitative, and Mixed Methods Approaches, J. David Creswell, John W. Creswell
4. Essentials of research design and methodology, Geoffrey R. Marczyk
5. Fundamental of Research Methodology and Statistics, Y.K. Singh

Nature of Teaching and Evaluation Methods :

Test Material
 Discussion forum
 Assessment
 Activity
 Assignment
 Quizzes
 Presentation / Viva-voice


 PRINCIPAL
 Dr. K. N. CHAVDA
 J. Z. SHAH ARTS &
 H. P. DESAI COMMERCE COLLEGE
 At & Po. AMROLI-394 107, ST.UTRAN(W.R.)
 TA. CHORYASI, DIST. SURAT.

