

Veer Narmad South Gujarat University, Surat.

**Admission Procedure, Syllabus and Award of PG Diploma in
Research Methodology**

(Effective from the academic year 2009)

A Course in Research Methodology

Introduction

The importance of training in social science research methodology cannot be over-emphasised. Just as the need for research on various social phenomena, issues and problems is being increasingly felt, the need for sound training in social research methodology is also being simultaneously realised. Research Problems require appropriate design and skills of data generation, data processing and statistical analysis. A good research needs not merely conceptual capabilities, but also a thorough command over methodological strategies and techniques, including basic knowledge of computers and statistical packages.

Quite often, many potential researchers are handicapped due to lack of research skills. Sound expertise and versatility in social science research methodology enable a researcher to undertake, with confidence, research on different issues and problems, which require appropriate designs and techniques.

Course Rationale

This course is centered around the premise that today's practitioners in the fields of social sciences need to have a solid base of knowledge in research methods in order to become effective decision makers in their field of expertise. In-depth understanding of research design and methodology should allow professionals to make research based decisions in their respective fields. It is also posited that familiarity with research and evaluation will impart a positive impact on practice

and policy development. Equally important, the course will provide students with the skills necessary to complete their dissertation.

Who Should Apply

Anyone concerned to develop advanced research skills, including consultants, university and public administration staffs, and NGO and trade union research officers. The normal minimum requirement is an honours degree in a social science subject. For students with significant, relevant work experience, an ordinary bachelor's degree may suffice.

Eligibility

1. Any graduate from recognized university will be eligible for the admission to the diploma course. A person who is already enrolled for any other course in the university will also be eligible to get admission to this course. A person who is working in any research institute, NGO or in any organization will also be considered for admission.
 1. Candidate will be admitted on the basis of scrutiny of his/ her application forms and personal interview, if necessary.
 2. Preference will be given to a postgraduate in Social Sciences and pursuing research.
2. On Successful completion of core courses consisting of papers 3 papers and a dissertation, P G Diploma in Research Methodology will be awarded.
3. Exemptions from regularly attending classes in some papers will be considered on the basis of educational qualifications and background of the student in relevant subjects.
4. A candidate is also permitted to pursue the course externally.

Duration

1. P G Diploma in Research Methodology will be one year, two-semester programme.
2. First semester will consist of content courses of three papers. The first semester will consist of 16-weeks duration.
3. Total teaching hours for taught course will be 40 hours. Details for each paper is given in the syllabus.
4. The students are required to write dissertation in second semester. The students will be given 6 months to submit dissertation after the completion of first semester examination.

Medium of Instruction : English.

Total Intake of Students : 30 Seats

Contents of the Course

Topics covered include managing research and writing proposals - philosophy and ethics of social research - analysis of quantitative data - group and individual interviews - principles and pitfalls of qualitative research - comparative methodology - observation - participatory and action research - archival research - getting the best out of the internet - developing hypotheses and formulating questions - considering gender - text and discourse analysis - sampling - large-scale projects linking academic and applied research.

Course Description

The Course in the research methodology provides basic knowledge about research methodology as it applies to social sciences. Social sciences practice and research share common features and processes as both are fundamentally problem-solving enterprises. Students are encouraged to generalize the basic concepts and

principles of science presented within this course for use in the knowledge building activities that take place throughout the broader curriculum.

The general goal of this basic research course is to introduce and develop skills needed to conceptualise a problem, make use of available literature, design a research strategy, evaluate, organize and intergrate relevant data (both existing and new), derive useful solutions based on knowledge, and communicate those solutions to clients and colleagues. It is expected that the attainment of this goal will serve to prepare students to continue their own professional education, contribute to the development of the profession as a whole, and maintain their service to clients at a standard commensurate with the current level of knowledge.

This course is designed to survey the basic processes of research methodology as practiced in the social sciences. Underlying principles of science and logic are emphasized and special attention is directed toward the recognition of common sources of error and bias in the implementation and interpretation of research studies as it affects the outcomes of research utilization. Students will be better able to recognize the impact of race, gender, age and sexual orientation on the research process.

Objectives

As a result of having complete the requirements of this course, the student will have demonstrated:

1. An understanding of the scientific process, its application in the social sciences, and its utilization in the problem solving approach to social science practice.
2. Acquisition of skills necessary to the assessment and interpretation of existing research as a prelude to its use in decision-making in social science practice.

3. The capacity to identify information needed to address questions and problems encountered in social sciences practice situations.
4. Knowledge and understanding of the range of research designs and their appropriate utilization by social scientists.
5. Research skills such as conceptualising a problem, formulating hypotheses and objectives, designing research strategy, collecting, analysing, and interpreting both quantitative and qualitative data, including commonly encountered statistical procedures.
6. Understanding of methods to control variation and bias, including factors that can affect the reliability, validity, and representativeness of the information used by social workers in the problem-solving process, particularly as they affect populations-at-risk.
7. Ability to identify the value assumptions and the ethical and political dilemmas encountered by social scientists in their efforts to gather, verify, and utilize knowledge with special emphasis given to the impact, which these have on oppressed groups.
8. Create a computer data file, and use a computer to produce tables, graphs, plots, and descriptive statistics of research data.
9. Interpret tables, graphs, plots, and descriptive statistics of research data.
10. Select, apply and interpret various statistical tests of hypothesis in order to draw and justify inferences based on research data.
11. Apply research findings to practice questions, in order to increase accountability in practice.

Conduct of Course:

A variety of teaching-learning methods and experiences will be used throughout the semester in an effort to address course content and to help students meet course objectives. Activities may include lectures, class

discussions, students presentations and the like. Experience of the students and the instructor will be relied on for illustrative purposes.

Competency goals of the course:

- The nature of scientific inquiry
- The role of positivism in scientific inquiry
- The differences among theory, method and data
- The research process
- The differences among the various methods of collecting data
- The differences among the various methods of analyzing data
- How to make an informed and critical evaluation of the research literature
- How to locate and use information about scientific research
- Why ethical behaviour is essential for the conduct of science
- An understanding of the concepts, terms and symbols used to describe research methodology;
- The ability to read, understand and critique research articles/reports;
- The ability to plan and write a research proposal; and
- Development an understanding of the strengths and weaknesses of various research designs and methods.

Course Outline

The programme comprises 3 core papers and a dissertation

Structure

Paper No.	First Semester	Total Marks
101	Research Process and Theoretical Approaches	100
102	Statistical Methods	100
103	Survey Methods and Qualitative Research	100
	Second Semester	
104	Dissertation	300

Syllabus

101 Research Process and Theoretical Approaches

Nature And Significance of Research Problems – The Literature Review – Data Analyses Strategies – Research Design and Methods

Positivism and Realism – Evolution of scientific inquiry, Induction and Deduction Debate; Verification versus falsification; Paradigms – Nature of Scientific Revolution.

Contemporary Theoretical Trends – Structuration Theory; Feminist Theories, Post-colonial Thinkers; Materialist Feminism and the Politics of Discourse.

References

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Bose P K (1995), Research Methodology, ICSSR, New Delhi.

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Creswell J.W. (2005). Research design: Qualitative, quantitative and mixed methods approaches, 2nd Edition, Thousand Oaks, CA: Sage.

Ghosh B N (1982), Scientific Methods and Social Research, Sterling Publishers Pvt.Ltd., New Delhi.

Grosop, M (1985), A Research Premier for the Social and Behavioural Sciences, Academic Press Inc.

Kenneth R Hoover (1991), The Elements of Social Scientific Thinking, St. Martin's Press, New York

Kerlinger F H (1986), Foundations of Behavioural Research, 3rd Edition, Holt, Reinhert and Winston Inc., USA

Kothari C R (2005), Research Methodology – Methods and Techniques, 2nd Edition, New Age International Publishers

Krishnaswami, O.R. (1993), Methodology of Research in Social Sciences, 1st Edition, Himalaya Publishing House

Miller, D.C., & Salkind, N.J. (2002). Handbook of research design and social, Newbury Park, CA : Sage.

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Cooper D R, Pamela S S(2004), Business Research Methods, 8th Edition, Tata McGraw Hill, New Delhi.

Tandon B C (1979), Research Methodology in Social Sciences, Chaitanya Publishing House, Allahabad.

Thomas S Kuhn (1970, The Structure of Scientific Evolutions, University of Chigao Press, Chicago

Tripathi P C (2002), A textbook of Research Methodology, 4th Edition, Sultan Chand & Sons, New Delhi.

Tufte, Edward R, The Visual Display of Quantitative Information, 2nd Edition, Cheshire, CT: Graphics Press LLC, 1997

Zikmund W G (2003), Business Research Methods, 7th Edition, Thompson South Western, Singapore)

102 Statistical Methods

Statistical Methods is a course in applied statistics that will investigate concepts and methods in descriptive and inferential statistics. The course is designed to provide students with the statistical background for doctoral level research. The application of statistics will be emphasized. Areas of study will include probability, F-distribution, confidence intervals, hypotheses testing, and correlation.

References

Aczel, A D and Sounderpandian J (2002) Business Statistics, 5th Edition, Tata McGraw Hill, New Delhi

Anthony and Biggs (2000), Mathematics for Economics and Finance, Cambridge University Press, Low Price Edition.

Bulmer, M G (1979), Principles of Statistics, Dover Publications

Chambers, J M, Cleveland W.S., Kleiner B., Tukey P.A. (1983), Graphical Methods for Data Analysis, Duxbury Press, Boston

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Hogg, R V (2006) Introduction to Mathematical Statistics, 6th Edition, Pearson Books

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J.C. Miller and J.N. Miller (1994), Statistics for Analytical Chemistry 3e Ellis Horwood, Chichester.

James T. McClave and P.George Benson (1995), A First Course in Business Statistics 6e Prentice Hall, Englewood Cliffs, NJ

Johnson R A (2005) Miller and Freund's Probability and Statistics for Engineers, Pearson Books

Larson, R and Farber, E (2005) Elementary Statistics: Picturing the World, 3rd Edition, Prentice Hall

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Sharma, J K (2003), Business Statistics, Pearson Books

Siegel, S (1956), Nonparametric Statistics, McGraw Hill.

Sternstein, M (2003), How to Prepare for the AP Statistics (Barron's How to Prepare for the Ap Statistics Advanced Placement Examination), Barron's Educational Series.

Triola, M F (2005), Elementary Statistics, 10th Edition, Addison Wesley

Tukey J W (1977), Exploratory Data Analysis, Addison-Wesley Publishing

Viswanathan P K (2003), Business Statistics: An Applied Orientation, Pearson Books

Wannacott and Wannacott (1972), Introductory Statistics for Business and Economics, John Weily & Sons, New York.

William P. Gardiner (1997), Statistics for the Biosciences. Prentice Hall, Hemel Hempstead

Yamane Taro (1977), Statistics, Harper & Raw, New York

Reading list for Statistical Packages

Afifi, A.A and V Clark (1984), Computer – aided Multivariate Analysis, Lifetime Learning Publications, California.

Bryman A & Cramer D (2004) Quantitative Data Analysis with SPSS 12 and 13 : A Guide for Social Scientists Routledge.

Field A (2000) Discovering Statistics Using SPSS for Windows : Advanced Techniques for Beginners. Sage Publications.

Hamilton LC (2004) Statistics with Stata. Brooks Cole.

Kinnear P & Gray CD (2004) SPSS Made Simple: Release 12.0 Psychology Press.

Landau S & Everitt BS (2003) A Handbook of Statistical Analysis Using SPSS. Chapman & Hall / CRC Press.

Matthew J Zagumny (2001), The SPSS Book: A Student Guide to the Statistical Package for the Social Sciences, Writers Club Press.

Pallant J (2004) SPSS Survival Manual. Open University Press.

Pandya Kiran, Bulsari Smruti (2005), Enjoy Statistics with SPSS, 1st Edition (Popular Prakashan, Surat.)

Russell Schutt (2006) *Investigating the Social World with SPSS Student Version 14.0*, 5th Edition, Sage Publications.

Ryan, T., Joiner, B., & Ryan B. (1985), *Minitab Student Handbook*, Duxbury Press, Boston.

103 Survey Research and Qualitative research

The Survey Research course is designed to provide doctoral students with an overview of survey research methods. Topics in the course will include survey design, implementation, sampling, data collection, follow-up, analyses, and ethics. Students will design a pilot survey in preparation for their dissertation research.

This course content on Qualitative Research includes in-depth and formal interviewing techniques, principles of field observation, content analysis, literature reviews, historical analysis focus groups, questionnaire design, and philosophical inquiry into qualitative research perspectives. Major emphasis in the course is placed upon learning how to integrate qualitative methods as appropriate.

References for Survey Research

Aday, L (1989) *Designing and Conducting Health Surveys: A Comprehensive Guide*, San Francisco, Jossey-Bass.

Alreck, P.L. & R.B. Settle (1985) *The Survey Research Handbook*, Homewood, Illinois: Irwin.

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Fowler, F.J. (1993). Survey Research Methods, 2nd Edition, Thousand Oaks CA, Sage Publications.

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Frey JH. (1988), Survey Research by telephone. New York:Sage

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Galliers, Robert, Information Systems Research : Issues, Methods & Practical Guidelines, Blackwell Scientific, 1992

Glock, C (1967), Survey Research in Social Sciences, Russels Sage Foundation, New York.

Huff, D (1954), How to lie with Statisitcs, New York:Norton

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Machin D, Campbell M, Fayers P & Pinol A (1997), Sample Size Tables for Clinical Studies. Oxford: Blackwell Science.

Rosenberg, M (1968), The Logic of Survey Analysis, Basic Book Inc. Publishers, New York

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Rubenstein, S M (1994), Surveying Public Opinion, Belmont, CA : Wadsworth Publishers.

Salant, P & Dillman, D.A. (1994), How to Conduct Your Own Survey, New York:Wiley

Scheaffer, R.L.,W Mendenhall, & L.Ott (1995), Elementary Survey Sampling, Washington, D.C.: Duxbury Press.

Sudman S (1967), Reducing the Cost of Surveys, Aldine Chicago.

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Weisberg, H.F.J.A. Krosnick, & B.D.Bowen (1989), Introduction to Survey Research and Data Analysis, Glenview, Illinois:Scott, Foresman and Company.

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Bogdan, Robert (1972), Participant observation in organizational settings. Syracuse: Syracuse University Press.

David Silverman (2006), Interpreting Qualitative Data, Third Edition, Sage Publications.

Denzin, N and Lincoln, Y (1994), Handbook of Qualitative Research. Newbury Park, CA:Sage.

Denzin, Norman K, Yvonna S Lincoln (1998), Editors, Collecting and Interpreting Qualitative Materials, 3rd Edition, Thousand Oaks, CA:Sage Publications,

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Hammersley M (1990) Reading ethnographic research : A critical guide. London: Longman.

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Marshall, Catherine and Rossman, Gretchen (1989), Designing qualitative research. Newbury Park, CA:Sage.

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Steven J Taylor, Robert Bogdan (1998), Introduction to Qualitative Research Methods, 3rd Edition, Wiley

Strauss, A (1987), Qualitative analysis for social scientists. Cambridge: Cambridge University Press.

Vincent Anafara (2006), Theoretical Frameworks in Qualitative Research, Sage Publications.

Dissertation:

The dissertation offers the student full opportunity to utilize and demonstrate his/her abilities and skills in social science research. As part of the course requirements, students are required to undertake a field/empirical research project. They are required to present a brief research proposal in the class before commencing work on the same. Each student will be supervised by the faculty member of the Department of Research Methodology and other faculty members of the University.

References

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Turabian Kate L (1996). A Manual for writers of term papers, theses, and dissertations. (6th Ed). Revised by John Grossman and Alice Bennett 1996 Series: Chicago guides to writing, editing, and publishing. Chicago: University of Chicago Press.