

Mandatory Course 1: Business Research Methods & Publication Ethics

Course Type:	PG: Program General	Course Credits:	4
Course Code:	C2PM412	Course Duration:	60 Hours

Course Objectives:

- To enable students to understand the concepts, tools, and techniques of business research and to develop the ability to design, conduct, analyze, and interpret research for effective managerial decision-making.

Course Outcomes:

- CO1: Identify research problem and develop research hypothesis on the basis of review of literature and research design.
- CO2: Construct the research process which includes research flow charts and various attitude & measurement scales, Questionnaire design, and various sampling techniques.
- CO3: Understand the methods of data collection with application in different research designs and demonstrate knowledge for proper sampling design and data processing methods.
- CO4: Apply modern statistical tools as univariate & bivariate analysis, Chi-square, and ANOVA to analyze the data applying critical thinking abilities for given research problems/questions.
- CO5: Prepare and evaluate various research reports maintaining ethical practices to solve business problems.

Unit / Module	Content	CO Mapping	Hours Assigned
1	Introduction to Research: objectives of research, types of research, difference between basic and applied research, research approaches, criteria for good research, research methods vs research methodology, social research approaches. Research Process and in social and business sciences.	CO1	3
2	Research Problem, Literature review and Formulation of Research Hypotheses: What	CO1	5

	is research problem, Management Decision Problem vs Management Research Problem; Problem identification process; Objectives of literature review, Sources of literature, literature review gaps, Types of Research hypothesis, Writing research proposal- Contents of a research proposal.		
3	Research Design: Nature and Classification of Research Designs, features of a good design, research design frame work, Dependent and independent variables. Exploratory, descriptive, diagnostic research design, Experimental research design.	CO1	5
4	Sampling: Sampling design process, Types of sampling, sampling and non-sampling errors, sample vs census, sampling errors, Determination of Sample size	CO2, CO3	6
5	Attitude Measurement and Scaling: quantitative and qualitative data, classification of measurement scale, goodness of measurement scale, types of scale, scale classification base, scaling techniques (comparative vs non comparative scaling techniques), and criteria for good measurement	CO2, CO3	4
6	Data collection and Data processing: Data collection: Primary Data-Observation methods, Survey methods, questionnaire, Types of Questionnaires, Process of Questionnaire Designing; Advantages and Disadvantages of Questionnaire Method. Pilot survey, Interviews: types of interviews. Secondary data; classification of data(internal and external data), research authentication(Methodology check and accuracy check) Data processing: Field Editing, Coding- Coding	CO2, CO3	7

	of Closed ended structured Questions, Coding of open ended structured Questions; Classification and Tabulation of data. Data cleaning, data adjusting. [Use of SPSS/EXCEL/JASP in Activity Based Learning is encouraged]		
7	Univariate and Bivariate Analysis of Data: Descriptive vs inferential analysis, descriptive analysis of univariate data, descriptive analysis of bivariate data (cross-tabulation). Microsoft EXCEL: Working in the spreadsheet, creating a worksheet Reliability test- Cronbach alpha [Use of SPSS/EXCEL/JASP in Activity Based Learning is encouraged]	CO4	7
8	Testing of Hypothesis: Steps in testing of hypothesis, Tests concerning Means- the case of single population; Tests for Difference between two population means; Use of SPSS in testing Hypothesis. Parametric and non-parametric test Z-test, t-test, f-test, One sample test, Two independent sample test, two related samples test. [Use of SPSS/EXCEL/JASP in Activity Based Learning is encouraged]	CO4	5
9	Analysis of variance: The ANOVA techniques, basic principles, one way ANOVA, Two way ANOVA, ANOCOVA, MANCOVA [Use of SPSS/EXCEL/JASP in Activity Based Learning is encouraged]	CO4	3
10	Chi-Square Tests: Chi square test for the Goodness of Fit; Chi square test for the independence of variables; Chi square test for the equality of more than two population proportions [Use of SPSS/EXCEL/JASP in Activity Based Learning is encouraged]	CO4	3

11	Data analysis: Statistical analysis, multivariate analysis, correlation analysis, regression analysis, Cluster Analysis [Use of SPSS/EXCEL/JASP in Activity Based Learning is encouraged]	CO4	6
12	Research Report Writing and Ethics in research: Need for effective documentation, types of research report, report preparation and presentation, report structure, presentation of data, bibliography and references. Guidelines for presenting tabular data, Guidelines for visual Representations. Meaning of Research Ethics: Clients Ethical code; Researchers Ethical code; Ethical Codes related to respondents; Responsibility of ethics in research Plagiarism check and understanding consequences of unethical practices [Suggested Activity Research paper writing; Use of Plagiarism software]	CO5	6

Text Books:

1. Business Research Methods – Cooper Schindler
2. Research Methodology Methods & Techniques – C.R. Kothari
3. Statistics for Management – Richard L Levin
4. Research Methods for Business: A Skill Building Approach - Uma Sekaran, Roger Bougie

Reference Books:

1. D. K. Bhattacharya: Research Methodology (Excel)
2. P. C. Tripathy: A text book of Research Methodology in Social Science
3. Saunder: Research Methods for business students (Pearson)
4. Marketing Research –Hair, Bush, Ortinau (2nd edition Tata McGraw Hill)
5. Business Research Methods – Alan Bryman & Emma Bell – Oxford Publications
6. Business Research Methods – Naval Bajpai – Pearson Publications
7. Business Research Methods- S N Murthy and U Bhojanna, Excel books
8. .Research Methodology Methods & Techniques – C.R.Kothari and Gaurav Garg, New age international limited
9. Research Methodology- S.S.Vinod Chandra, S.Anand Hareendran,-Pearson