

<b>Semester: VII</b>
<b>Course Title: INTRODUCTION TO RESEARCH METHODOLOGY</b>
<b>Course Code: C4BC230711T</b>
<b>Credits: 6</b>
<b>Category: MAJOR</b>
<b>Theory/Practical/Composite: Theory</b>
<b>Course Overview:</b> The course introduces the basics of research, the possible scopes of business research, the research process involved in business research, research design, measurement issues and skills. The conceptual framework necessary in formulating a research hypothesis and research problems will be elaborated in detail through this course.
<b>Course Outcome:</b> After learning this course, the students will be able to:
1. Recall the meaning, objectives and key features of the Scope and Role of Business Research in decision making and Research Methodology. Recognize the types of observational Techniques, Questionnaires and Scales of Measurement and identify the sampling frame characteristics of a Good Sample while remembering the uses and features of a good Research Design.
2. Summarize the characteristics of a good hypothesis and explain the concept and importance of Research Design. Describe the Pros and Cons of primary and secondary data, Census and Sample Survey and interpret the types of questions, Sampling and Scaling techniques.
3. Execute the steps in Research Process, demonstrate the applications of Business Research and solve sample size.
4. Compare the types of Business Research and interviewing techniques. Examine relative merits and pitfalls of Observation vs. Survey method, analyze case studies, compare Sampling Error and Non-Sampling Error, justify importance of Reliability and Validity in Research and attribute Practical Considerations in Sampling and Sample Size.
5. Justify the research objectives and judge the criteria for evaluating secondary sources of data.
6. Create motivation for the scope and role of business research in decision making, construct variables and formulate research problems and develop different hypotheses.
<b>Prerequisites:</b> Basics of statistics.

SYLLABUS				
Unit/Module with topic name	Content	Number of Classes	CO Mapping	Cognitive Level
I. Nature and Scope of Business Research	Meaning – Nature - Objectives – Motivation – Key Features – Scope and Role of Business Research in Decision Making. Terminology of Business Research, Applications of Business Research. Understanding the Language of Research – Constructs – Variables. Steps in the Research Process. Preparation of Research Proposal. Types of Business Research. Nature and Scope of Research Methodology – Formulation of Research Problem, Research Objectives – Different Hypotheses, Characteristics of Good Hypothesis.	12	CO1 CO2 CO3 CO4 CO5 CO6	K1(REMEMBER) K2 (UNDERSTAND) K3 (APPLY) K4 (ANALYSE) K5 (EVALUATE) K6 (CREATE)
II. Research Design	Research Design – Concept, Uses of Research Design, Importance of Research Design – Features of a Good Research Design. Types: Exploratory, Descriptive, Correlational, Causal, Explanatory, Mixed Methods, Longitudinal, and Case Study. Secondary Data Research: Advantages & Disadvantages of Secondary Data, Criteria for Evaluating Secondary Sources. Secondary Sources of Data in	10	CO1 CO2 CO4 CO5 CO6	K1 (REMEMBER) K2 (UNDERSTAND) K4 (ANALYSE) K5 (EVALUATE) K6 (CREATE)

	Indian Context. Business Report Writing (using Secondary Data).			
III. Sources and Collection of Primary Data	Primary Data: Concept, Sources, Pros and Cons, Applicability in Research, Observation vs. Survey – relative merits and pitfalls. Types of Observational Technique, Classification of interviewing techniques – Depth Interviews, Focus Groups and Projective Techniques. Questionnaire Design – Types of Questionnaires (structured vs. unstructured, disguised vs non-disguised), types of questions (open-ended, dichotomous, multiple-choice questions, biases in questionnaire design – leading questions, loaded questions, double – barreled questions). Census vs. Sample Survey – Pros and Cons. Importance of Reliability and Validity in Research. Business Report Writing (using Primary Data).	12	CO1 CO2 CO3 CO4 CO6	K1 (REMEMBER) K2 (UNDERSTAND) K3 (APPLY) K4 (ANALYSE) K6 (CREATE)
IV. Sampling	Concepts of Statistical Population – Sample - Sampling Frame – Sampling Error and Non-Sampling Error, Non-Response Bias, Characteristics of a Good Sample. Probability Sampling: Simple Random Sampling, Systematic Sampling, Stratified Random Sampling, Multistage Sampling. Non-	12	CO1 CO2 CO3 CO4	K1 (REMEMBER) K2 (UNDERSTAND) K3 (APPLY) K4 (ANALYSE)

	Probability Sampling: Convenience Sampling, Purposive Sampling, Snowball Sampling. Determining Size of the Sample – Practical Considerations in Sampling and Sample Size.			
V. Measurement and Scaling	Primary Scales of Measurement – Nominal, Ordinal, Interval and Ratio. Scaling Techniques and its Types - Paired Comparison, Rank Order Scale, Itemized Ratings, Summated Scale, Semantic Differential Scale, and Likert Scale.	8	CO1 CO2	K1 (REMEMBER) K2 (UNDERSTAND)

#### Textbooks

1. Cooper, R. D., Schilder, P. S., & Sharma, J. K. (2017). *Business Research Methods* (11 ed.). McGraw Hill Education.
2. Deepak Chawla and Neena Sondhi, *Research Methodology: Concepts and Cases*, Vikas Publishing House, India.
3. Amalendu Bhunia, "Diving Deep into Business Research", Techno World, 2024.
4. Adams, J., Khan, H., & Raeside, R. (2014). *Research methods for business and social science*. 80vxx.
5. Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & sons.
6. Quilan, C., Babin, B., Cor, J., Griffin, M., & Zikmund, W. G. (2024). *Research Methods for Business: A Real World Approach* (3 ed.). Cengage Learning Publishing House.

#### Suggested readings

1. Alan Bryman & Emma Bell, "Business Research Methods", Oxford University Press, 2011.
2. T.S Wilkinson & P.L. Bhandarkar, "Methodology and Techniques of Social Research", 2010.

3. Richard A. Johnson & Dean W. Wichern, "Applied Multivariate Statistical Analysis", Prentice Hall International Inc.
4. Ott, R. L., & Longnecker, M. (2010). <i>An introduction to statistical methods and data analysis</i> . Cengage Learning Inc..
<b>Web Resources</b>
1. Blumberg, B., Cooper, D., & Schindler, P. (2014). <i>EBOOK: Business research methods</i> . McGraw Hill.
2. <a href="https://www.london.ac.uk/study/courses/moocs/understanding-research-methods">https://www.london.ac.uk/study/courses/moocs/understanding-research-methods</a>
3. <a href="https://study.sagepub.com/introducing-or/student-resources/case-studies">https://study.sagepub.com/introducing-or/student-resources/case-studies</a>
4. <a href="https://onlinecourses.nptel.ac.in/noc23_ge36/preview">https://onlinecourses.nptel.ac.in/noc23_ge36/preview</a>

### Course outcomes (COs) and Cognitive Level Mapping

COs	CO Description	Cognitive levels
CO1	Recall the meaning, objectives and key features of the Scope and Role of Business Research in decision making and Research Methodology. Recognize the types of observational Techniques, Questionnaires and Scales of Measurement and identify the sampling frame characteristics of a Good Sample while remembering the uses and features of a good Research Design.	K1(Remember)
CO2	Summarize the characteristics of a good hypothesis and explain the concept and importance of Research Design. Describe the Pros and Cons of primary and secondary data, Census and Sample Survey and interpret the types of questions, Sampling and Scaling techniques.	K2 (Understand)
CO3	Execute the steps in Research Process, demonstrate the applications of Business Research and solve sample size.	K3 (Apply)
CO4	Compare types of Business Research and interviewing techniques, examine relative merits and pitfalls of Observation vs. Survey method, analyze case studies, compare Sampling Error and Non-Sampling Error,	K4 (Analyse)

	justify importance of Reliability and Validity in Research and attribute Practical Considerations in Sampling and Sample Size.	
<b>CO5</b>	Justify the research objectives and judge the criteria for evaluating secondary sources of data.	K5 (Evaluate)
<b>CO6</b>	Create motivation for the scope and role of business research in decision making, construct variables and formulate research problems and develop different hypotheses.	K6 (Create)