Name of the Programme : Ph.D. (Economics)
Course Code : ECO-700
Title of the Course: Research Methodology
Number of Credits: 4
Effective from AY: 2023-24

| Prerequisites for the course: | Post graduate in any discipline |
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| Course Objective: | Provide exposure to incoming research students in economics to a broad range of research protocols and methods |
| Content: | Module -1: Objectives and types of research: <br> Motivation and objectives - Research methods vs Methodology. Types of research - Descriptive vs. Analytical, Applied vs. Fundamental, Quantitative vs. Qualitative, Conceptual vs. Empirical. Defining and formulating the research problem - Selecting the problem - Importance of literature review in identifying research gap, Development of working hypothesis. <br> Module-2 Research design and methods: <br> 15 Hours <br> Research design - Basic Principles- Need of research design - Features of good design - Important concepts relating to research design - Observation and Facts, Laws and Theories, Prediction and explanation, Induction, Deduction, Development of Models. Developing a research plan Exploration, Description, Diagnosis, Experimentation. Determining experimental and sample designs. <br> Module- 3: Data Collection and analysis: <br> Execution of the research - Observation and Collection of data - Methods of data collection - Sampling Methods- Data Processing and Analysis strategies, Hypothesis Testing, Probability Distribution - Normal, Student 't'-distribution, chi-square \& F-distribution - Hypothesis Testing for Statistical Significance - Correlation and two variable regression, Anova test. <br> Module -4: Reporting and thesis writing: Preparation - Practice - Making presentation - Use of visual aids Importance of effective communication. |
| Pedagogy: | In class or MOOC of GU |
| References/ Readings | 1. Kothari C.R., Garg, Gaurav; (2020), Research Methodology, Fourth Edition, New Age International, New Delhi.. <br> 2. John W. Creswell. 2014. "Research Design: Qualitative, Quantitative and Mixed Methods Approaches, Fourth Edition, Sage, NewDelhi. <br> 3. Babbie, Earl. R. 2013. "The Practice of Social Research." Cengage Learning, Canada. <br> 4. Young P.V., Scientific Social Surveys and Research, Prentice Hall of India Pvt Ltd, 2012. <br> 5. Cooper, R. Donald and Pamela S. Schindler (2003) Business Research Methods, Delhi, Tata McGraw-Hill. <br> 6. Kumar, Renjith (2009) Research Methodology: A Step by Step Guide for Research, Delhi, Pearson Education. <br> 7. Uma, Shekaran; and Bougie, Roger (2016) Research Methodology for Business: A Skill Building Approach, Wiley, New York, John Wiley Publishers. <br> 8. Kate L. Turabian. 2006. "A Manual for Writers of Term papers, Theses and Dissertations." The University of Chicago press, Chicago. |
| Course Outcomes | Upon completion of this course, the students are expected to: <br> 1. Develop the most appropriate methodology for the research studies of their choice. <br> 2. Familiarize and differentiate the use of various research methods and techniques. <br> 3. Define a research problem and prepare the appropriate research design for the research problem. <br> 4. Illustrate the data collection techniques and data analysis and presentation. <br> 5. Demonstrate the sampling techniques and its fundamentals. <br> 6. Familiarize the task of interpretation and the art of writing research reports. |

