## 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

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Prerequisites	Post graduate in any discipline
for the course:	Descride supervise to incoming account students in second state to a base to a first to a first to a first to a
Course	Provide exposure to incoming research students in economics to a broad range of
Objective:	research protocols and methods
Content:	Module -1: Objectives and types of research:15 HoursMotivation 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.15 HoursModule-2 Research design and methods: Research design – Basic Principles- Need of research design — Features of15 Hours
	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.
	Module- 3: Data Collection and analysis:15 HoursExecution 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.15 Hours
	Module -4: Reporting and thesis writing:15 HoursStructure and components of scientific reports - Types of report – Technical reports and thesis – Significance – Different steps in the preparation – Layout, structure and Language of typical reports – Illustrations and tables - Bibliography, referencing and footnotes - Oral presentation – Planning – Preparation – Practice – Making presentation – Use of visual aids - Importance of effective communication.15 Hours
Pedagogy:	In class or MOOC of GU
References/ Readings	<ol> <li>Kothari C.R., Garg, Gaurav; (2020), <i>Research Methodology</i>, Fourth Edition, New Age International, New Delhi</li> <li>John W. Creswell. 2014. <i>"Research Design: Qualitative, Quantitative and Mixed</i> <i>Methods</i> Approaches, Fourth Edition, Sage, NewDelhi.</li> <li>Babbie, Earl. R. 2013. <i>"The Practice of Social Research."</i> Cengage Learning, Canada.</li> <li>Young P.V., <i>Scientific Social Surveys and Research</i>, Prentice Hall of India Pvt Ltd, 2012.</li> <li>Cooper, R. Donald and Pamela S. Schindler (2003) <i>Business Research Methods</i>, Delhi, Tata McGraw-Hill.</li> <li>Kumar, Renjith (2009) <i>Research Methodology: A Step by Step Guide for Research</i>, Delhi, Pearson Education.</li> <li>Uma, Shekaran; and Bougie, Roger (2016) <i>Research Methodology for Business: A Skill Building Approach</i>, Wiley, New York, John Wiley Publishers.</li> </ol>
Course	8. Kate L. Turabian. 2006. "A Manual for Writers of Term papers, Theses and Dissertations." The University of Chicago press, Chicago.
Course Outcomes	<ol> <li>Upon completion of this course, the students are expected to:</li> <li>Develop the most appropriate methodology for the research studies of their choice.</li> <li>Familiarize and differentiate the use of various research methods and techniques.</li> <li>Define a research problem and prepare the appropriate research design for the research problem.</li> <li>Illustrate the data collection techniques and data analysis and presentation.</li> </ol>
	<ol> <li>Demonstrate the sampling techniques and its fundamentals.</li> <li>Familiarize the task of interpretation and the art of writing research reports.</li> </ol>