

**STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI**  
**COURSE PLAN**  
**June - November 2024**

**Department** : Economics  
**Name/s of the Faculty** : Dr. J. Regi Manimagala/ Ms. Rekha M  
**Course Title** : Research Methods and Analysis  
**Course Code** : 23EC/PC/RM14  
**Shift** : I

**COURSE OUTCOMES (COs)**

<b>COs</b>	<b>Description</b>	<b>CL</b>
<b>CO1</b>	Understand theoretical and practical aspects of research in Economics	K1
<b>CO2</b>	Demonstrate an understanding of various research design, data collection methods and data analysis techniques	K2
<b>CO3</b>	Develop critical thinking and problem-solving skills to identify gaps formulate research questions and make informed decisions	K3
<b>CO4</b>	Gain hands on experience with statistical analysis tools and software to analyze a range of datasets	K4, K5
<b>CO5</b>	Design and execute research projects, demonstrating competence in research design data collection, analysis and interpretation	K6

Week	Unit No.	Content	Cognitive Level	Teaching Hours	COs	Teaching Learning Methodology	Assessment Methods
Jun 24 – 26, 2024 (Day Order 4 - 6)	<b>Unit 1</b> 1.1 1.2  <b>Unit 5</b> 5.1	<b>Introduction to Research</b> Overview of Science and Scientific Method Characteristics and Elements of Scientific Methods – Empirical Approach, Observation, Questions Hypothesis, Experiment, Analyses, Conclusions, Replication <b>Practicals</b> 5.1 Data Preparation: Logging and Tracking Data, Data Screening, Constructing a Database	K1- K2	6	CO1 -4	Lecture / Discussion Practicals	CA Test, Practical and Mini Project
Jun 27 – July 4, 2024 (Day Order 1 - 6)	1.3  1.4  1.5  5.1  5.2	Goals of Scientific Research – Description Prediction, Understanding / Explanation Social Science Research – Introduction, Meaning, Objectives, Significance and Limitations Types of Research: Pure, Applied, Analytical, Exploratory, The Data Codebook, Data Entry, Transforming Data, Recoding Variable 5.1 Data Analysis -Descriptive Statistics – Frequency Distribution, Grouped Frequency Distribution, Summary Statistics 5.2	K1- K4	6	CO1 -4	Lecture / Discussion Practicals	CA Test, Practical and Mini Project

Week	Unit No.	Content	Cognitive Level	Teaching Hours	COs	Teaching Learning Methodology	Assessment Methods
July 5 – 12, 2024 (Day Order 1 - 6)	1.5  <b>Unit 2</b> 2.1 2.2 2.3  5.3	Types of Research: Descriptive, Surveys, Conceptual/ Theoretical Models <b>Planning and Designing a Research Study</b> 2.1 Introduction 2.2 Choosing a Research Topic 2.3 Literature Review- Meaning and purpose of a literature review, sources, documenting sources, conducting a literature search, recording the literature, writing a literature review Inferential Statistics: Correlation and Regression – Simple, Multiple	K1- K4	6	CO1 -4	Lecture / Discussion Practicals	CA Test, Practical and Mini Project
July 15 – 23, 2024 (Day Order 1 - 6)	2.4  5.3	Research Problem – Meaning , Formulating the research problem Inferential Statistics : Correlation and Regression – Simple, Multiple	K1- K4	4	CO1 -4	Lecture / Discussion Practicals	CA Test, Practical and Mini Project
July 24 – 31, 2024 (Day Order 1 - 6)	2.5  2.6	Articulating Hypothesis, Specification of Hypothesis Overview of Choosing variables to study, Research Participants, Assigning Study/ Research Participants to Groups	K1-K4	2	CO1-4	Lecture / Discussion Practicals	CA Test, Practical and Mini Project

Week	Unit No.	Content	Cognitive Level	Teaching Hours	COs	Teaching Learning Methodology	Assessment Methods
Aug 1 – 5, 2024 (Day Order 1 - 3)	2.7  5.3	Choosing Samples: Probability Sampling, Non-Probability Sampling Ethical Consideration in Research : Non Linear Relationship – Functional Form – Double Log	K1-K4	6	CO1-4	Lecture / Discussion Practicals	CA Test, Practical and Mini Project
Aug 6 – 10, 2024		<b>C.A. Test - I</b>					
Aug 12 – 14, 2024 (Day Order 4-6)	2.8  Unit 3  3.1  5.3	Introduction to Publication Ethics and Misconduct- Fabrication, Falsification, Plagiarism (types), Redundant Publication or Salami Slicing, Improper Authorship (Gift and Ghost), Conflict of Interest and Citation Manipulation <b>Data Collection, Assessment Methods and Measurement Strategies</b> Types of Data: Time Series, Cross-Sectional, Panel Data Simple Log	K1-K4	6	CO1-4	Lecture / Discussion Practicals	CA Test, Practical and Mini Project

Week	Unit No.	Content	Cognitive Level	Teaching Hours	COs	Teaching Learning Methodology	Assessment Methods
Aug 16 – 23, 2024 (Day Order 1-6)	<b>Unit 3</b> 3.1 3.2 5.3	<b>Data Collection, Assessment Methods and Measurement Strategies</b> Methods of Data Collection Introduction to Collecting Primary Data Through Observation: Participant Observation, Structural Observation, Internet Mediated Observation, Observation using Videography Collecting primary data using semi-structural, In-depth, Questionnaires Reciprocal	K1-K4	6	CO1-5	Lecture / Discussion Practicals	CA Test, Practical and Mini Project
Aug 27 – Sep 3, 2024 (Day Order 1-6)	3.2 3.3 5.3	Interviews - Group Interview, Semi-Structured, In-depth, Focus group Using Secondary Data - Sources of data (Published): Brief Overview of contents of publications such as Economic Survey, Handbook of Statistics on Indian Economy, World Development Report, Statistical Outline of India, RBI Bulletin, Census Reports, NSSO, Handbook on Indian Agriculture, Internet Website: Ministry of HRD, RBI, World Bank, ADB, IMF Regression using Dummy Variable	K1-K3	6	CO1-5	Lecture / Discussion Practicals	CA Test, Practical and Mini Project

Week	Unit No.	Content	Cognitive Level	Teaching Hours	COs	Teaching Learning Methodology	Assessment Methods
Sep 4 – 11, 2024 (Day Order 1-6)	3.4  <b>Unit 4</b> 4.1 4.2	Scales of Measurement: Nominal, Ordinal, Interval, Ratio, Minimizing Measurement Error, Assessing Reliability, Strategies for increasing reliability <b>Research Design and Research Report</b> Introduction to Research Design Experimental Research Design Comparing Two Means – ‘t’ Test	K1-K4	6	CO1-5	Lecture / Discussion Practicals	CA Test, Practical and Mini Project
Sep 12 - 20, 2024 (Day Order 1-6)	4.2	Completely Randomized Design, Latin Square Design	K1-K5	2	CO1-5	Lecture / Discussion Practicals	CA Test, Practical and Mini Project
Sep 23 - 26, 2024 (Day Order 1-4)	4.3 5.3	Non- Experimental Designs / Qualitative Design: Case Studies Comparing Several Means – ‘ANOVA’	K1-K6	46	CO1-5	Lecture / Discussion Practicals	Practicals and Mini Project
Sep 27 – Oct 3, 2024		<b>C.A. Test - II</b>					

<b>Week</b>	<b>Unit No.</b>	<b>Content</b>	<b>Cognitive Level</b>	<b>Teaching Hours</b>	<b>COs</b>	<b>Teaching Learning Methodology</b>	<b>Assessment Methods</b>
Oct 4 – 5, 2024 (Day 5 & 6))	4.3 4.4 4.5	Observation, Survey Studies, Focus Groups Introduction to Report Writing Types of Research Reports	K1-K4	6	CO1-5	Lecture / Discussion Practicals	Practicals and Mini Project
Oct 7 - 15, 2024 (Day Order 1 to 6)	4.6 4.7 5.3	Structuring Research Reports Presentation of Research Report Comparing Several Means – ‘ANOVA’	K1-K4	6	CO1-5	Lecture / Discussion Practicals	Practicals and Mini Project
Oct 16 - 22, 2024 (Day Order 1 to 6)	4.7	Presentation of Research Report	K1-K3	2	CO1-5	Lecture / Discussion Practicals	Practicals and Mini Project
Oct 23 - 24, 2024 (Day Order 1 to 2)	<b>REVISION</b>						