

**DATA ANALYSIS USING R & R-STUDIO**  
Course Coordinators :  
Dr Sudip Mukherjee, and Dr. Mitali Bachher  
Dept. of Economics and Mathematics

**When the course is successfully finished, the students will understand**

- How Data Science can Solve Many Common Business Problems
- How to write code in R & R-studio
- Descriptive and Inferential Statistics for Data Science
- Linear and Logistic Regression
- Using data science in the areas of marketing and finance

**Course Outline**

Unit 1: Basics of R & R-studio : Installing R and R-Studio ,Variables and Data types, Basic R Code [ 6hrs]

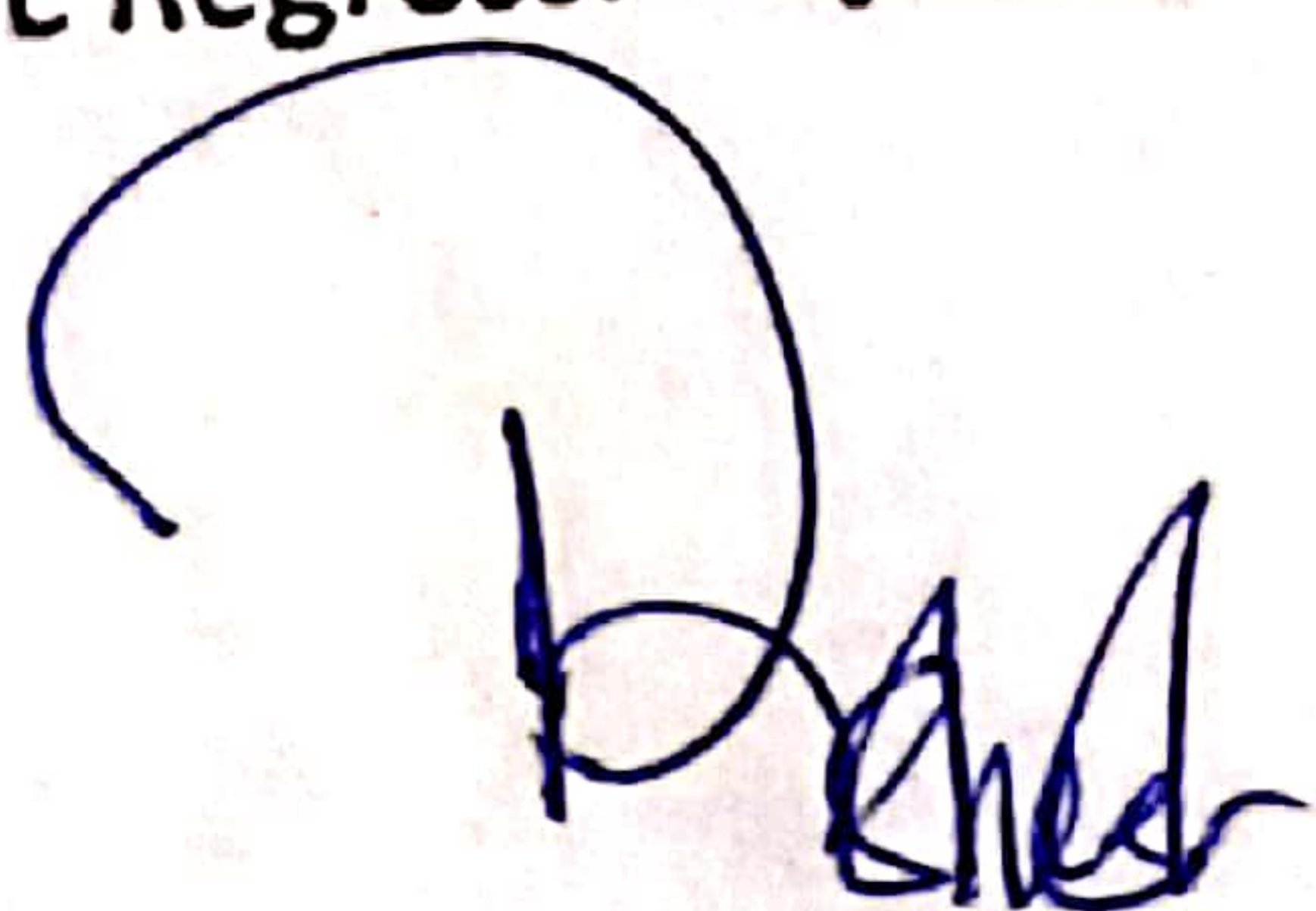
Unit 2: Graphs using R: Bar, Pie, Histogram, Scatter [4 hrs]

Unit 3: Introduction to Statistics with R-Studio: Measures of Central Tendency and Dispersion, Introduction to Probability, Probability Distributions, Central Limit Theorem, Confidence Interval Estimation, Hypothesis testing (Z test, T test, Chi Sq Test), Types of Errors, Introduction to ANOVA.[14 hrs]

Unit 4: Non parametric test [4 hrs]

Unit 5: Correlation, Simple and Multiple Regression [8 hrs]

Unit 6: Logistic Regression [4hrs]



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