

Hour	Unit	Topic	Teaching Methodology	Remarks
1	I	Introduction to Random Variables	Whiteboard	
2	I	Discrete Random Variables	Whiteboard	
3	I	Distribution Function	Whiteboard	
4	I	Expectation of Discrete Random Variables	Whiteboard	
5	I	Binomial Distribution - Definition and Properties	Whiteboard	
6	I	Binomial Distribution - Examples and Applications	Whiteboard	
7	I	Poisson Distribution - Definition and Properties	Whiteboard	
8	I	Poisson Distribution - Examples and Applications	Whiteboard	
9	I	Mixed Distribution Problems (Binomial/Poisson)	Whiteboard	
10	II	Introduction to Continuous Random Variables	Whiteboard	
11	II	Continuous Distribution Function	Whiteboard	
12	II	Expectation of Continuous Variables	Whiteboard	
13	II	Introduction to Normal Distribution	Whiteboard	
14	II	Properties of Normal Distribution	Whiteboard	
15	II	Applications of Normal Distribution	Whiteboard	
16	III	Introduction to Sampling Theory	Whiteboard	
17	III	Population vs. Sample	Whiteboard	
18	III	Sampling Distribution of Means (Known Variance)	Whiteboard	
19	III	Sampling Distribution of Means (Unknown Variance)	Whiteboard	
20	III	Central Limit Theorem	Whiteboard	
21	III	Sampling Distribution of Sums & Differences	Whiteboard	
22	III	Point Estimation and Maximum Error	Whiteboard	
23	III	Interval Estimation	Whiteboard	
24	IV	Introduction to Hypothesis Testing	Whiteboard	
25	IV	Null and Alternative Hypotheses	Whiteboard	
26	IV	Type I and Type II Errors	Whiteboard	

27	IV	Level of Significance, One-tail & Two-tail Tests	Whiteboard	
28	IV	Test for Single Mean (Large Sample)	Whiteboard	
29	IV	Test for Single Proportion (Large Sample)	Whiteboard	
30	IV	Test for Difference of Means (Large Sample)	Whiteboard	
31	IV	Test for Difference of Proportions	Whiteboard	
32	V	Introduction to Small Sample Tests	Whiteboard	
33	V	Student's t-Test for Single Mean	Whiteboard	
34	V	Student's t-Test for Difference of Means	Whiteboard	
35	V	F-Test for Equality of Variances	Whiteboard	
36	V	Chi-Square Test for Independence of Attributes	Whiteboard	
37	V	Chi-Square Goodness of Fit Test	Whiteboard	
38	V	ANOVA – One-way Classification	Whiteboard	
39	V	ANOVA – Two-way Classification	Whiteboard	
40	VI	Introduction to Correlation	Whiteboard	
41	VI	Types of Correlation	Whiteboard	
42	VI	Karl Pearson's Correlation Coefficient	Whiteboard	
43	VI	Properties of Pearson's Correlation	Whiteboard	
44	VI	Rank Correlation (Spearman's)	Whiteboard	
45	VI	Introduction to Regression	Whiteboard	
46	VI	Linear Regression Equations	Whiteboard	
47	VI	Properties of Regression Coefficients	Whiteboard	
48	VI	Correlation vs Regression – Summary & Problems	Whiteboard	