Satyug Darshan Institute of Engineering and Technology

Lesson Plan / Teaching Plan / Lecture Plan with Progress : BCA DS – 5th Semester : 2025-26

Course Name (Code) : Machine Learning-1 (BCG-321-V) Faculty - Anjali Mehta

Topics / lectures are arranged in sequence - same - as to be taught in the class. Maintain data related to "Date" in its hard copy.

S. No.	Lecture No	Topic Description	Teaching Pedagogy	Reference Material	Remarks, if any
1	1	Intro to ML (Unit 1)	Board	T1	
2	2	Issues in ML	Board	T1	
3	3	Types of ML	Board	T1	
4	4	Types continued..	Board	T1	
5	5	7 Steps to make ML Model	Board	T1	
6	6	Applications of ML	Board + PPT	T1	
7	7	Data representation	Board	T1	
8	8	Data representation con..	Board	T1	
9	9	Intro to Unit 2	Board	T1	
10	10	KNN with Numerical	Board	T1	
11	11	Knn continued..	Board + PPT	T1	
12	12	Decision Tree	Board + PPT	T1	
13	13	Decision Tree Continued..	Board + PPT	T1	
14	14	Naïve Bayes	Board + PPT	T1	
15	15	Naïve Bayes continued..	Board + PPT	T1	
16	16	SVM	Board	T1	
17	17	SVM Numerical	Board	T1	
18	18	Doubt class	Board		
19	19	Overfitting and Underfitting	Board	T1	
20	20	Bias & Variance trade off	Board	T1	
21	21	Kernal methods	Board	T1	
22	22	Regression (Linear)	Board	T1	
23	23	Logistic Regression	Board	T1	
24	24	Numerical	Board + PPT	T1	
25	25	Class Test 2			
26	26	Intro to Unit 3	Board	T1	
27	27	K-mean clustering	Board	T1	
28	28	PCA	Board+ PPT	T1	
29	29	Kernal PCA	Board	T1	
30	30	Matrix Factorization	Board	T1	
31	31	Numerical	Board + PPT	T1	
32	32	Matrix Completion	Board	T1	
33	33	Numerical	Board	T1	
34	34	Ensemble methods	Board	T1	
35	35	Boosting	Board	T1	
36	36	Numerical	Board	T1	
37	37	Bagging	Board + PPT	T1	
38	38	Numerical	Board	T1	
39	39	Random Forest	Board	T1	
40	40	Numerical	Board	T1	
41	41	Doubt class	Board	T1	
42	42	Class test 3			
43	43	Intro to unit 4	Board	T1	
44	44	Scalable learning	Board	T1	
45	45	Feature Eng.	Board	T1	
46	46	Intro to Bayesian	Board	T1	
47	47	Inference	Board	T1	
48	48	Inference continued..	Board + PPT	T1	
49	49	Recent trends in ML	Board + PPT	T1	
50	50	Classification methods	Board + PPT	T1	
51	51	Classification methods con..	Board + PPT	T1	
52	52	Doubt class	Board	T1	
53	53	CT 4			
54	54	Revision	Board		
55	55	Revision	Board		

Study Material / Books / Web-resources / Online Courses Links etc.

S. No.	Description
1	Kevin Murphy," Machine Learning: A Probabilistic Perspective", MIT Press, 2012
2	Ethem Alpaydin, —Introduction to Machine Learning 3e (Adaptive Computation and Machine Learning Series)ll, Third Edition, MIT Press, 2014
3	Tom M Mitchell, —Machine Learningll, First Edition, McGraw Hill Education..