

Department of Computer Science and Engineering

Lesson Plan cum Diary 2015-16

Name of the Subject : DATA WAREHOUSING AND DATA MINING(14MT20503)

Name of the faculty Members : Mr. P.Venkateswarlu Reddy

Class & Semester : M. Tech. (CNIS) – I Semester

S. No.	Topic	No. of periods required	Date(s) covered	No. of periods used	Book(s) followed	Topics for self study
Unit-I: INTRODUCTION TO DATA WAREHOUSE AND DATA MINING						
1.	Data Warehouse	1			T1	Classification of Data Mining Systems
2.	A Multidimensional Data Model	1			T1	
3.	Data Warehouse Architecture	1			T1	
4.	Data Warehouse Implementation	1			T1	
5.	From Data Warehouse to Data Mining.	1			T1	
6.	Data Mining – Kinds of Data	1			T1	
7.	Data Mining Functionalities	2			T1	
8.	Primitives –Major Issues in Data Mining.	2			T1	
Total no of periods required:		10	Total no of periods used:			
Unit-II: DATA PREPROCESSING, MINING FREQUENT PATTERNS, AND ASSOCIATIONS						
9.	Descriptive Data Summarization	1			T1	Discretization and concept hierarchy generation
10.	Data Cleaning	1			T1	
11.	Data Integration and Transformation	1			T1	
12.	Data Reduction	2			T1	
13.	Efficient and Scalable Frequent Item set Mining Methods	3			T1	
14.	Mining various kinds of Association Rules	1			T1	
15.	Constraint based association mining.	1			T1	
Total no of periods required:		10	Total no of periods used:			
Unit-III: CLASSIFICATION AND PREDICTION						
16.	Issues regarding classification and prediction	1			T1	Support
17.	classification by decision tree induction	2			T1	
18.	Bayesian classification	2				

19.	Rule based classification	2			T1	Vector Machines
20.	classification by Back propagation	2			T1	
21.	Prediction	1			T1	
22.	Accuracy and Error Measures.	1			T1	
Total no of periods required:		11	Total no of periods used:			
Unit-IV: CLUSTER ANALYSIS						
23.	Types of Data in Cluster Analysis	2			T1	Constraint- Based Cluster Analysis
24.	A Categorization of Major Clustering Methods	1			T1	
25.	Partitioning Methods	2			T1	
26.	Hierarchical Methods	2			T1	
27.	Density based Methods	1			T1	
28.	Grid based methods	1			T1	
29.	Model based clustering methods	1			T1	
30.	Clustering high dimensional data	1			T1	
31.	Outlier analysis.	2			T1	
Total no of periods required:		13	Total no of periods used:			
Unit-V: MINING STREAM, TIME SERIES, TEXT MINING AND WORLD WIDE WEB						
32.	Mining data streams	2			T1	Multimedia Data Mining
33.	Mining Time Series Data	2			T1	
34.	Spatial Data Mining	2			T1	
35.	Text Mining	2			T1	
36.	Mining the World Wide Web.	2			T1	
Total no of periods required:		10	Total no of periods used:			
Grand total of periods required:		54				

TEXTBOOKS:

T1. Jiawei Han and Micheline Kamber, “*Data Mining: Concepts and Techniques*,” Second Edition, Elsevier, 2009

REFERENCE BOOKS:

R1. Margaret H Dunham, “*Data Mining Introductory and Advanced Topics*,” Second Ed, Pearson Education, 2006

R2. Amitesh Sinha, “*Data Warehousing*,” Thomson Learning, 2007

R3. Xingdong Wu, Vipin Kumar, “*The Top Ten Algorithms in Data Mining*,” Taylor and Francis Group, 2009

Signature of the faculty Member

HOD, CSE