

Bhoj Reddy Engineering College for Women: Hyderabad

Department of Information Technology

Lesson plan of faculty member for the academic year 2020–21

Class: IV B Tech

Branch-Section: IT- A

Semester: I

Subject: Information retrieval systems

Lectures per week: 3

Lecture Number	Topics to be covered	Date (s)
UNIT - I: Introduction to IRS		
1	Introduction to Information Retrieval Systems	01 September 2020
2	Objectives of Information Retrieval Systems	04 September 2020
3	Functional Overview	05 September 2020
4	Relationship to Database Management Systems	07 September 2020
5	Digital Libraries	11 September 2020
6	Data Warehouses	12 September 2020
7	Information Retrieval System Capabilities: Search Capabilities	14 September 2020
8	Browse Capabilities	18 September 2020
9	Miscellaneous Capabilities	19 September 2020
UNIT - II: Cataloging and Indexing		
10	History and Objectives of Indexing	21 September 2020
11	Indexing Process, Automatic Indexing	25 September 2020
12	Information Extraction	26 September 2020
13	Introduction to Data Structure	28 September 2020
14	Stemming Algorithms	03 October 2020
15	Inverted File Structure, N-Gram Data Structures	05 October 2020
16	PAT Data Structure, Signature File Structure	09 October 2019
17	Hypertext and XML Data Structures	10 October 2020
18	Hidden Markov Models	12 October 2020
UNIT - III: Automatic Indexing		
19	Classes of Automatic Indexing	16 October 2020
20	Statistical Indexing	26 October 2020
21	Concept Indexing	31 October 2020
22	Hypertext Linkages	09 November 2020
23	Document and Term Clustering: Introduction to Clustering	13 November 2020
24	Thesaurus Generation	16 November 2020
25	Item Clustering	20 November 2020
26	Hierarchy of Clusters	21 November 2020
UNIT - IV: User Search Techniques		
27	Search Statements and Binding	23 November 2020
28	Similarity Measures and Ranking, Relevance Feedback	27 November 2020
29	Selective Dissemination of Information Search	28 November 2020
30	Weighted Searches of Boolean Systems	04 December 2020
31	Searching the INTERNET and Hypertext	05 December 2020
32	Introduction to Information Visualization, Information Visualization Technologies	07 December 2020
33	Cognition and Perception	11 December 2020
UNIT - V: Text Search Algorithms		
34	Introduction to Text Search Techniques	12 December 2020

35	Software Text Search Algorithms	14 December 2020
36	Hardware Text Search Systems	18 December 2020
37	Multimedia Information Retrieval: Spoken Language Audio Retrieval	19 December 2020
38	Non-Speech Audio Retrieval, Graph Retrieval	21 December 2020
39	Imagery Retrieval, Video Retrieval	28 December 2020
40	Revision	02 January 2020

Text books:

1. Information Storage and Retrieval Systems – Theory and Implementation, Second Edition, Gerald J. Kowalski, Mark T. Maybury, Springer.

References:

1. Frakes, W.B., Ricardo Baeza-Yates: Information Retrieval Data Structures and Algorithms, Prentice Hall.
2. Information Storage & Retrieval By Robert Korfhage – John Wiley & Sons.
3. Modern Information Retrieval By Yates and Neto Pearson Education.

Name and signature of the faculty: S. Revathi

Name and signature of Head of the Department: Dr.C.Murugamani
