COURSE FILE SUMMARY

COURSE INFORMATION			
College / Institute / Center:	Management & Technology	**Department:**	Business Information Systems Dept.
Program Title:	Bachelor of Business Administration	**Program Code:**	CR
Course Title:	Information Retrieval and Search Engines	**Course Code:**	CR317 (CR341)
# Hours:	------- 32 hr --------- Lecture	------ 28 hr ------- Lab / Tutorial	------- 3 hr --------- Credit
Pre Requisites CR115, ES225, CR226			

COURSE AIM

This course is focused on the way information is stored, retrieved, and displayed. Simple bibliographic databases are giving way to unregulated and unorganized multimedia data repositories, which can give the user great difficulty when searching for information. This course shows how to handle full-text, graphics, video and audio, and how to distribute these massive databases over networks. The course will focus on theoretical development of information retrieval system for multimedia contents as well as practical design and implementation issues associated with Internet search engines. Topics include probabilistic retrieval, relevance feedback, indexing of multimedia data, and applications in e-commerce.

COURSE OBJECTIVES

This course plays an important role on improving student understanding of technical concepts on the inner work of search engines and Web servers. The students should be able to benefit from these concepts in designing optimized web sites. It also help student understand how to achieve goals such as improving the ranking of the organization in the search results which is important for achieving the marketing goals of the organization.

STAFF REQUIREMENTS			
	Qualifications	**Special Skills**	**Number**
Lectures	Ph.D. CS or MIS	Practical Experience in MIS	1
Tutorials	M.Sc. CS or MIS	Practical Experience in MIS	1
Laboratories / Workshops	B.Sc. or M.Sc. CS or MIS	Practical Experience in MIS	1

LECTURE SCHEDULE			
Lecture			
#	Week	Hrs	Description
1	1st.	3	Introduction to IR
2	2nd.	3	Modeling of Information Retrieval Systems
3	3rd.	3	Modeling of Information Retrieval Systems Continued
4	4th.	3	Query Languages
5	5th.	3	Text and Multimedia Languages and Properties
6	6th.	3	Information Theory
7	7th	3	**7th Week Exam.**
8	8th.	3	Indexing and Searching
9	9th.	3	Parallel and Distributed IR
10	10th.	3	Visualization and User Interface
11	11th.	3	Visualization and User Interface
12	12th.	3	Searching the Web
13	13th.	3	Writing a Technical Report
14	14th.	3	Project Presentation
15	15th.	3	Project Presentation
16	16th.	3	**Final Exam.**

TEXT BOOKS	
Code*	Description
TB	Modern Information Retrieval by Ricardo Baeza-Yates, Berthier Ribeiro-Neto, ISBN: 020139829X, Addison Wesley.

REFERENCE BOOKS	
Code*	Description
RB	Information Storage and Retrieval by Robert R. Korfhage, ISBN: 0471143383, Wiley.

TUTORIAL SCHEDULE

Tutorial			Topic
#	Week	Hrs	

LABORATORY WORKSHOP SCHEDULE

Laboratory				Description
#	Week	Hrs.	Code	
1	1st	3		Introduction to IR
2	2nd	3		Applications on IR Modeling
3	3rd	3		Applications on IR Modeling Continued
4	4th	3		Exercises on Query Languages
5	5th	3		Operations on Text and Multimedia Languages
6	6h	3		Operations on Text and Multimedia Properties
7	7th.	3		Revision
8	8th.	3		Information Theory
9	9th.	3		Applications on Indexing and Searching
10	10th	3		Exercises on Parallel and Distributed IR
11	11th	3		Visualization and User Interface
12	12th	3		Visualization and User Interface
13	13th	3		Operations on Web Searching
14	14th	3		Exercises on Writing a Technical Report
15	15th	3		Revision

COMPUTER USAGE

The Computer will be used in all Lab sessions.

GRADING AND ASSESSMENT METHOD

Week #	Points	Written	Oral	Term Paper	Continuous	Thesis	Practical		
7	30	30							
12	20			20					
1-15	10				10				
16	40	40							

READING MATERIAL

Code*	Description

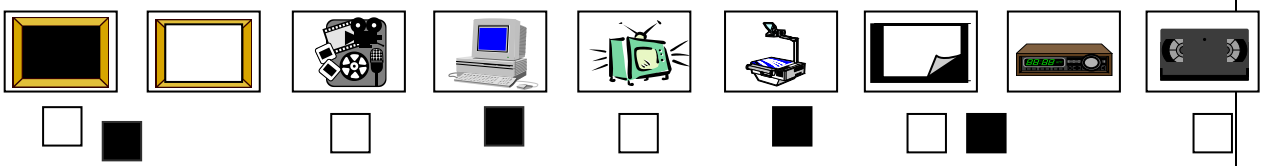
* TB : Text Book RB: Reference Book ST: Standards / Codes LN: Lecture Notes

SUPPLEMENTARY MATERIAL

Code*	Description
OS	Slides for the Lab sessions
SW	Microsoft Excel XP
SW	Microsoft Access XP

*PR: Periodical SW: Software VT: Video Tape OS: Overhead Slide Projector
MD: Model AC: Audio Cassette NC: Notebook Computer

EDUCATIONAL RESOURCES



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