King Saud University
College of Computer and Information Sciences
Department of Information Systems

IS 531

DOCUMENT STORAGE & RETRIEVAL SYSTEMS

Semester II, Academic Year 1438-1439
Section 50057: Meeting Time: Mon. (2:00PM-4:50PM)
Section 60386: Meeting Time: Tue. (2:00PM-4:50PM)

Instructor: Dr. Ahmad A. Alhamed, Room 2053, Email: aalhamed@ksu.edu.sa
Office Hours: After the lecture or by appointments.
Course Website: KSU LMS (http://lms.ksu.edu.sa)

Course Description:

The objective of the course is to introduce students to the theoretical underpinnings of information retrieval (IR), an active and rapid growing branch of applied computational science. Main topics of the course include document representation, document indexing, digital information storage, retrieval, and distribution. Emphasis is given to application of IR theories and practices to web indexing and web search engines. Specifically, this course will help students

- to identify basic theories and analysis tools as they apply to information retrieval
- to develop understanding of problems and potentials of current IR systems
- to learn and appreciate different retrieval algorithms and systems
- to apply various indexing, matching, organizing, and evaluating methods to IR problems
- to become aware of current experimental and theoretical IR research

Textbook(s) and/or Other Required Materials:

Primary: **Introduction to Information Retrieval**
Authors: Christopher D. Manning, Prabhakar Raghavan and Hinrich Schütze
Publisher: Cambridge University Press, 2009. (E-Book).

Modern Information Retrieval: The Concepts and Technology behind Search (2nd Edition) (ACM Press Books)
Authors: Ricardo Baeza-Yates, Berthier Ribeiro-Neto
Publisher: Addison-Wesley Professional; 2 edition (February 10, 2011)

Supplementary & readings:

Will be provided through the semester.

Major Topics covered

1. Introduction to IR
2. Basic IR models
3. Text processing
4. Scoring, term weighting and the vector space model
5. Evaluation in IR
6. Document representation
7. Web search
8. Web crawling and indexes
9. Question answering
10. Special IR Systems

Methodology

- Lectures
- Discussions
- Completion of the assigned reading
- Students' assignments and activities, such as, papers review and critique, reports, and presentations.

Policies

Attendance- Must adhere to KSU attendance policy
No Makeup Exam Policy

Assessment Plan:

Assignments and activities	35%
Mid-Term Exam – lecture notes	25%
Final Exam – lecture notes	40%
Total	**100%**

GOOD LUCK