

COS 435 Spring 2009
Summary for 2nd Exam

All material through April 16 will be covered on exam out Tuesday, April 28 and due Thursday, April 30, 2009.

Emphasis will be on materials not covered on first exam

Major topics (highlights) up to midterm exam

- Models
 - Modeling queries and documents
 - Satisfying, scoring and ranking w.r.t query
 - Vector models
 - LSI
 - Link analysis for ranking
- Evaluating retrieval systems
- Algorithms and data structures
 - Index structures
 - Evaluating queries using indexes
 - Building indexes

Major topics (highlights) since midterm exam

- Indexing algorithms, continued
 - Compressing index structures
 - Distributed computing for index construction and query evaluation
- Using user characteristics and feedback
 - Search refinement
 - Recommendation methods
- Other analysis of information objects
 - Clustering
 - Detecting near-duplicate documents
- Semi-structured information
 - XML
- Crawling the Web
 - Characteristics of the changing Web

**A summary of reading assigned to date in *Introduction to Information Retrieval*.
Schedule and Assignments Web page is the definitive source of reading assignments.
Bold indicates assigned since March 3.**

Chapter 1 – all sections

Chapter 2 – all sections

Chapter 3 – section 3.1: structures for dictionaries

Rest on wildcard queries and spelling correction

Chapter 4 – all sections

Chapter 5 – all sections

Chapter 6 - all sections except:

6.1 zone scoring

6.4.4 advanced dealing with document length in scoring

Chapter 7 – Section 7.1, except 7.1.6, and 7.2

Chapter 8 – all sections

Chapter 9 – all sections

Chapter 10 – all sections

Chapter 16: all sections except:

16.3 Evaluation of clustering

16.5 Model-based clustering

Chapter 17: all sections except

17.5 Optimality of HAC

17.7 Cluster labeling

Chapter 18 – all sections

Chapter 19 –all sections except:

19.5 estimating relative sizes of search engine indexes

(includes 19.6 finding near-duplicate pages)

Chapter 20 all sections except:

20.4 Connectivity servers

Chapter 21 - all sections