**Department of Computer & Electrical Engineering
and Computer Science
Florida Atlantic University
Course Syllabus**

1. Course title/number, number of credit hours	
COT6930: Information Retrieval	3 # of credit hours

2. Course prerequisites, corequisites, and where the course fits in the program of study
COP3530 Data Structures and Algorithm Analysis Or permission of the instructor

3. Course logistics
Term: Fall 2015 This is a classroom lecture course TR 12:30pm-1:50pm FL401 Text book: Christopher D. Manning, Prabhakar Raghavan, Hinrich Schütze: Introduction to Information Retrieval, Cambridge University Press, July, 2008. ISBN: 9780521865715 This course has moderate design content.

4. Instructor contact information	
Instructor's name *Office address* *Office Hours* *Contact telephone number* *Email address*	Dr. Dingding Wang, Assistant Professor Engineering East (EE96) Rm 510 Tue 2:00pm-3:30pm Thu 2:00pm-3:30pm 561-297-3228 wangd@fau.edu

5. TA contact information	
TA's name *Office address* *Office Hours* *Contact telephone number* *Email address*	

6. Course description
This course teaches concepts, techniques, and popular tools and applications in information retrieval (IR), which aims to obtain relevant information from a collection of resources. The class will cover efficient text indexing, text processing, web search, and text mining. New applications will also be introduced.

7. Course objectives/student learning outcomes/program outcomes	
Course objectives	This course will provide students with both theory and applications of Information Retrieval. Students will gain basic to advanced knowledge and hands-on experience.
Student learning outcomes & relationship to ABET a-k objectives	At the end of the class, students should be able to master latest techniques of text indexing, web search, text mining and system evaluation including building index, calculating term weights and ranking scores, etc. Students will form teams and apply these techniques on real-world web data using IR tools.

8. Course evaluation method

Assignments (computer-based)-   80 %
Project Report - 20 %		

9. Course grading scale

Grading Scale:
90 and above: "A", 87-89: "A-", 83-86: "B+", 80-82: "B", 77-79 : "B-", 73-76: "C+", 70-72: "C", 67-69: "C-",
63-66: "D+", 60-62: "D", 51-59: "D-", 50 and below: "F."

10. Policy on makeup tests, late work, and incompletes

Makeup exams are given only if there is solid evidence of a medical or otherwise serious emergency that prevents the student of participating in the exam. Makeup exams will be administered and proctored by department personnel unless there are other pre-approved arrangements.

A grade of incomplete will be assigned only in the case of solid evidence of medical or otherwise serious emergency situation.

Must turn in homework, reports and projects on time. One point per working day will be deducted from the late assignment. Will not accept your work after 3 working days or the solution has been provided.

11. Special course requirements

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12. Classroom etiquette policy

University policy requires that in order to enhance and maintain a productive atmosphere for education, personal communication devices, such as cellular phones and laptops, are to be disabled in class sessions.

13. Disability policy statement

In compliance with the Americans with Disabilities Act (ADA), students who require special accommodations due to a disability to properly execute coursework must register with the Office for Students with Disabilities (OSD) located in Boca Raton campus, SU 133 (561) 297-3880 and follow all OSD procedures.

14. Honor code policy

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and place high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. See University Regulation 4.001 at
www.fau.edu/regulations/chapter4/4.001_Code_of_Academic_Integrity.pdf

15. Required texts/reading

Christopher D. Manning, Prabhakar Raghavan, Hinrich Schütze: Introduction to Information Retrieval, Cambridge University Press, July, 2008. ISBN: 9780521865715
Hand-outs and notes

16. Supplementary/recommended readings

Bruce Croft, Donald Metzler, Trevor Strohman: Search Engines: Information Retrieval in Practice.
ISBN-10: 0136072240 • ISBN-13: 9780136072249

17. Course topical outline, including dates for exams/quizzes, papers, completion of reading

Topics	Approximate # 1.5 hr. lecture
Indexing, term weighting, vector space model	4
Scoring and ranking in a search system	2
Useful text processing tools	2
System evaluation	2
Text clustering	4
Text classification	2
Text summarization	4
Tools and Applications	4
Other IR topics	4

COT 6930: Introduction to Information Retrieval - Fall 2015
Description:
This course teaches concepts, techniques, and popular applications in information retrieval, which aims to obtain relevant information from a collection of resources. The class will first teaches text processing and analysis using different tools, then introduces practical techniques such as text mining using data mining approaches, and finally gives lectures on various topics of information systems such as music information retrieval and recommendation systems to broaden your knowledge.
Textbook:
Christopher D. Manning, Prabhakar Raghavan, Hinrich Schütze: Introduction to Information Retrieval, Cambridge University Press, July, 2008. ISBN: 9780521865715
Instructor:
Dingding Wang, wangd@fau.edu
Goal:
To help students gain basic to advanced knowledge and hands-on experience in information retrieval. At the end of the class, students should be able to master latest techniques and useful tools of text indexing, web search, text mining and system evaluation. Students will apply these techniques and tools to perform information retrieval tasks.
Prerequisites:
COP3530 Data Structures and Algorithm Analysis

Topics:

- Index Construction
    --Document processing
    --Term weighting schemes
- Text Processing Tools
- Web Search
    --Scoring and ranking algorithms
- Ranking and Search Tools
- IR System Evaluation
- Text Mining
    --Text clustering
    --Text classification
    --Text summarization
- Other Applications
    --Music Information Retrieval
    --Recommendation systems

Tentative Grading Policy:

Assignments (computer-based): 80%
Project Report: 20%