



CS172 : Information Retrieval
Fall 2019

Instructor Info

Prof. Mariam Salloum

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Office: Bourns Hall A (Room 159 B)

Office Hours: M 12:30 - 1:30, TH 1:00 - 2:00 and by appointment

Website: www.cs.ucr.edu/~msalloum/teaching

Course Overview

This course will cover models for information retrieval, techniques for indexing and searching, and algorithms for classification and clustering. It will also cover latent semantic indexing, link analysis and ranking, Map-Reduce architecture and Hadoop, to different degrees of detail, time permitting.

- Efficient text indexing
- Boolean and vector-space retrieval models
- Evaluation and interface issues
- IR techniques for the web, including crawling, link-based algorithms, and metadata usage
- Document clustering and classification
- Traditional and machine learning-based ranking approaches
- Social networks search

Textbooks

Search Engines: Information Retrieval in Practice

Bruce Croft, Donald Metzler, Trevor Strohman.

Addison Wesley; 1 edition (February 16, 2009)

ISBN-10: 0136072240/ISBN-13: 978-0136072249

Available here : <http://ciir.cs.umass.edu/downloads/SEIRiP.pdf>

Also recommended for reference:

- Christopher D. Manning, Prabhakar Raghavan and Hinrich Schutze, Introduction to Information Retrieval, Cambridge University Press. 2008.
- Modern Information Retrieval the concepts and technology behind search.
- Hearst, M.A. Search User Interfaces, Cambridge University Press, September, 2009.

Course Logistics

CampusWire

- CampusWire will be used for discussions- announcements. Questions relating to lecture or assignment should be posted to discussion board, not emailed to teachers, so any teacher/student can respond and fellow students benefit from answers.
- LINK: <https://campuswire.com/c/G16C76071> CODE: 3522

Course Material (Google Share Drive)

- Google Drive will be used to host lecture slides, reading material, midterm solutions, etc.
- Use your UCR email when accessing the drive
- LINK: <https://drive.google.com/drive/folders/11yRc1P5N4M5AyfLRIfbnpDxtv9fmu8kF?usp=sharing>

iLearn

- iLearn will be used to turn-in assignments. We will not accept assignments via email. iLearn will also be used to post grades, so please check often to ensure your grades are accurate.

Who should I email/contact?

- **Miscellaneous basic policy questions:** When is the midterm? When is the assignment due? First, read the course information found on the syllabus on website. Any additional questions should be posted on discussion page.
- **Help with assignments or course topics:** Please post on Canvas or ask TA or myself during office hours. If you think everyone can benefit from your question, then make the post public. If however, if the question is something specific about your code or grade, then please make the post private.
- **Anything sensitive and confidential:** Please email me at msalloum@cs.ucr.edu (please include course number in the subject.)

Grade Breakdown

Your final grade will be calculated based on the following grade distribution:

Assignments	20%
Midterms(x2)	40%
Project	30 %
Quizzes	5 %
Class Participation	5 %
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Total	100%

- **Assignments:** This course is designed to be a hands-on learning experience. I believe that students learn better by doing. As part of this philosophy, there will be a series of homework assignments during the quarter. These assignments are meant to help you learn the theory covered in class by practical implementation of the concepts.

Late Homework Policy : All of the assignments are to be submitted electronically. Always check the assignment page for due dates. Assignments can be submitted up to a **maximum of 3 days past the deadline**. There will be a deduction of 10% penalty for each day late.

- **Midterms:** There will be **two written in-class midterms** during the quarter. Both midterms are closed book/notes. There will no makeup exams unless you let me know of any conflicts ahead of time and bring a doctor's note. We will have an in-class review the Tuesday before the midterm. I will usually handout a study guide the week before the midterm.

Midterm 1 on Thursday Oct. 24th

Midterm 2 on Thursday Nov. 21st

- **Project:** There will be a team-based project toward the end of the quarter (instead of a final exam). You may work in teams of three to build a information retrieval system. More details will be provided later in the quarter. **Important Note:** I expect that in most cases, everyone in the group will get the same grade. However I reserve the right to give different grades to students in the same group if I feel that it is warranted. This will be based on contribution outlined in status reports and the team assessment.
- **Quizzes:** We will have several short in-class quizzes. Quizzes will be announced in the previous class. The objective of the quizzes is to allow you to review for the midterm.
- **Class Participation:** Attendance to class and lab discussion is expected. Active participation during lecture along with completion of in-class exercises and surveys will determine the participation grade.

Open Door Policy

If you are struggling with homework or a specific topic, please don't hesitate to ask for help. I have an open door policy, so please stop by my office for help or just to chat. If my office hours conflict with your schedule, please ask to make an appointment with me.

I'd be happy to talk about career or course advising, questions about research and other opportunities, concerns about performance in class, and suggestions for improving the class, good CS-related jokes, etc. You don't need a 'reason' to stop by my office, I would like to just get to meet as many of you as possible over the 10-weeks, so stop by to introduce yourself.

Academic Integrity

While I encourage you to discuss homework problems among yourselves, when it comes to finally completing the assignment, you are required to work alone (unless the assignment states you can work in groups). It is unacceptable take an extended piece of code written by another person and incorporate it into your submitted assignment as your own work.

Similarly, you may get ideas from books and on the Web, but you may not import large pieces of code into your own work. If you have any uncertainty about this policy, please check with me.

Accommodation

If you have a disability or believe you may have a disability, you can arrange for accommodations by contacting Services for Students with Disabilities (SSD) at 951-827-4538 (voice) or specserv@ucr.edu (email). Students needing academic accommodations must first register with SSD and provide required disability-related documentation. If you already have approved accommodation(s), you are advised to notify the faculty for each course.