CS 491H/691H - Data Science & Big Data

Richard Kelley
Spring 2014

1 Course Description

An introduction to the concepts and methods of data science, including data munging, web scraping, REST APIs, linear algebra, probability, statistics, machine learning, data visualization, distributed systems, and MapReduce.

Students will program in a variety of environments, including Python, R, and Scala.

2 Course Staff

Your instructor is Richard Kelley. His office is in SEM 255. See below for office hours.

3 Course Times & Locations

The class has two components:

1. Lab - Mondays, 2:30 to 3:45. Tentatively in ECC B. You’ll receive confirmation of this via Piazza.

2. Lecture - Wednesday, 2:30 to 3:45. SEM 257. This will only kinda be lecture. You may be asked to bring a laptop so we can get real work done in class.

4 Reading

The course has no required textbooks (there aren’t any for this subject). However, there will be regular reading assignments outside of class. These assignments will involve reading papers, essays, blog posts, and book excerpts. You may also be required to watch videos or listen to podcasts on occasion.
5 Piazza

This term we will be using Piazza for class discussion. The system is highly catered to getting you help fast and efficiently from classmates, the TA, and myself. Rather than emailing questions to the teaching staff, I encourage you to post your questions on Piazza. If you have any problems or feedback for the developers, email team@piazza.com.

You can find our course page at https://piazza.com/unr/spring2014/cs491h/home.

6 Office Hours

By appointment via Piazza. This works significantly better than attempting to find the one fifteen-minute slice that's open in everybody's calendars.

7 Grading

Your grade will be determined by a few factors:

- Class Participation - 10% of your grade.
- Midterm Exam - 19% of your grade.
- Final Exam - 20% of your grade.
- Semester Project - 51% of your grade.

8 Statement on Academic Dishonesty

Cheating, plagiarism or otherwise obtaining grades under false pretenses constitute academic dishonesty according to the code of this university. Academic dishonesty will not be tolerated and penalties can include canceling a student's enrollment without a grade, giving an F for the course or for the assignment. For more details, see the UNR General Catalog.

9 Statement on Disability Services

Any student with a disability needing academic adjustments or accommodations is requested to speak with me or the Disability Resource Center (Thompson Building, Suite 101) as soon as possible to arrange for appropriate accommodations.
10 Statement for Academic Success Services

Your student fees cover usage of the Math Center (www.unr.edu/mathcenter/), Tutoring Center (784-6801 or www.unr.edu/tutoring/), and University Writing Center (784-6030 or http://www.unr.edu/writing_center/). These centers support your classroom learning; it is your responsibility to take advantage of their services. Keep in mind that seeking help outside of class is the sign of a responsible and successful student.

11 Statement on Audio and Video Recording

Surreptitious or covert video-taping of class or unauthorized audio recording of class is prohibited by law and by Board of Regents policy. This class may be videotaped or audio recorded only with the written permission of the instructor. In order to accommodate students with disabilities, some students may have been given permission to record class lectures and discussions. Therefore, students should understand that their comments during class may be recorded.