□ 1. COURSE INFORMATION:
  □ Quarter-Year: Spring 2015
  □ Name: Introduction to Big Data and Analytics
  □ Course-Section-CRN: CIS 64F - 61Y - 43276
  □ Days and Time: Tuesdays (6:00 pm – 8:50 pm)

□ 2. COURSE REQUIREMENTS:
  □ Requisites: Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
  □ Course Description: Introduction to Big Data, management of unstructured and structured data and design of large-scale database systems. Concepts covered include Map Reduce parallel processing algorithms, Real-time analytics and Predictive analytics, attributes of Big Data and related issues. Introduction to large-scale file systems and parallel processing algorithms.
  □ Textbooks:
    1) *Big Data and Business Analytics*, Jay Liebowitz, DSc, CRC Press, ©2013
    2) *Data Mining: Concepts and Techniques*, Third Edition (The Morgan Kaufmann Series in Data Management Systems), by Jiawei Han, Micheline Kamber and Jian Pei, © 2011
  □ Student Learning Outcomes:
    Design, implement and debug a large-scale database system using technology like Hadoop or Cassandra.
    1) Explore Big Data technologies as means to solving key business analytical problems.
    2) Interpret and analyze techniques for setting up patterns for data analysis.
    3) Compare and contract the data and relation algorithms.
    4) Examine data preprocessing and visualization techniques for enabling data analytic scenarios.
    5) Articulate the characteristics of regression, forecasting and classification techniques for predictive analytics.
    6) Interpret and analyze architecture of database clustering technologies.

□ 3. INSTRUCTOR INFORMATION:
  □ Name: Mounjed Moussalem
  □ District email: moussalem.mounjed@fhda.edu

□ 4. ATTENDANCE REQUIREMENTS
Attendance is mandatory. The exams are based on class lectures and the techniques you have used on the related programming assignments, so any absence is a disadvantage. Please refer to the syllabus for further details.

□ 5. GRADING CRITERIA
    Exams (60%): Midterm Exam at the end of the 6th week (30%)
    Final Exam at the end of the Quarter (30%)
    Tuesday, June 23 at 6:15 p.m. – 8:15 p.m.

    Assignments (40%): 8 Assignments (8x5% = 40%)

□ Important Dates:
For a complete reference of all withdrawal dates and deadlines, refer to the De Anza College registration page at the college web site here:
  [http://www.deanza.edu/calendar/springdates.html](http://www.deanza.edu/calendar/springdates.html)
To continue in this class, you must participate weekly in all areas: assignments, exams and discussion.