

**BUAL 5650/6650/6656**  
**Big Data I**  
**Fall 2014**

**Instructor:** Dr. Dianne Hall  
410 Lowder Hall  
[halldia@auburn.edu](mailto:halldia@auburn.edu) (use ONLY your Auburn account)  
844-6443

**Class Hours:** TR 9:30 – 10:45

**Class Location:** Lowder 21 – NOTE: DRINKS ARE NOT ALLOWED IN THE LAB

**Office Hours:** Wednesday 8:00 – 10:00 am, or by appointment

**Students are encouraged to regularly check their official university e-mail accounts for announcements.**

**Required Text(s):**

Big Data for Dummies, Hurwitz, et al. (2013), Wiley  
Too Big to Ignore: the Business Case for Big Data, Simon (2013), Wiley

Other readings as assigned.

**Description and Objectives of the Course**

This course is designed as an introductory course on data management, analysis, and interpretation, particularly with regard to the term ‘Big Data.’ To fully understand what all the fuss is about, one must first understand data as a grossly underutilized business asset. This course begins with providing the student with an understanding of data as an asset, and continues toward an understanding of structuring data for use in the organization. The student will then study the implications of creating a data warehouse from organizational transactions to begin to build an organizational dataset. Acquisition, extraction, cleansing, transformation, and loading of data from various sources will be discussed. Strategic use of resultant datasets, data quality and governance issues, security, and other related topics will be discussed. The student will leave the course with an appreciation of the complexity of data use and a foundation on which to build analysis skills.

**Material Covered:**

<b>Weeks 1, 2, 3, 4</b>	<b>Big Data Basics and Terminology</b>
<b>Weeks 5, 6, 7</b>	<b>Modeling and Analysis, Data Mining, Artificial Neural Networks</b>
<b>Weeks 8, 9, 10</b>	<b>Text Mining, Web Mining, Data Warehousing, Technology Foundations for Big Data</b>
<b>Weeks 11, 12, 13, 14</b>	<b>Big Data Management, Big Data Implementation</b>
<b>Week 15</b>	<b>Project</b>

**PREREQUISITES: MNGT/BUAL 2600, 3600, or equivalent**

## Grades and Grading Policy

### Grade Composition:

Reading Reports	20%
Exams	65%
Big Data Project	10%
Attendance/Participation	5%

Standard grading will be used in this class (> 89.49% = A, etc.).

**Exams:** Exams will be a combination of take-home essays and an in-class standard exam that may include multiple choice, true/false questions, and short answer questions. Make-up exams will be in the short-answer format and will be available no longer than three weeks following the original exam date. You are strongly encouraged to take all exams at the scheduled time.

You must attend the scheduled exam periods which are listed on the class schedule; the only exception is for an official excuse (see the eHandbook). If you miss an exam and you have a university-approved excuse, you must contact me within one week of the scheduled exam date; otherwise, you will receive a **zero** for that exam.

Every effort will be made to have exams graded and the grade returned no later than 1 week following administration of the exam. Graded exams may be examined during announced times **ONLY**. If you believe there was a numerical mistake made in grading your exam you must request a review of your exam in writing to me within five days of viewing your exam. Otherwise, I will **not** review your exam and your grade will stand.

**Projects and Assignments:** Projects for this class are intended to extend the student's mastery of the subject as well as develop research and writing skills. Reflection reports on readings will be required. The project for the class will be the development of a big data analysis project proposal.

**Participation:** Be in class on time. Participate in class both through solicited response and through relevant comments and questions. If you have a question, please ask it; it is likely that someone else has the same question. Take advantage of office hours to discuss aspects of the course. I encourage e-mail communication and will try to respond to the whole class on pertinent issues. Distance students may participate through email or Canvas discussions.

**Personal Policy:** Please be respectful of your instructor and your classmates. Arrive on time and ready to participate in the discussion (this means you read the material before class). Simply sitting in a seat during class is not an effective way to learn! Do not leave during class except in an emergency. Please remember to turn off audio on your cell phones, MP3 players, tablets.....

**Communication:** I will use Canvas and your official Auburn University e-mail address for course communication. It is your responsibility to contact the Information Technology Help

Desk to have this address forward mail to the e-mail address that you regularly check. If you email me, do not use any account other than your official Auburn account. I filter out others to reduce spam.

### **Distance Learning Students**

Off-campus students will be expected to coordinate their exams with the proctor designated by the Student Services office of the distance learning office.

Attendance and participation points may be accumulated by participating in discussion through emailed questions or comments (which I will distribute if emailed only to me), or through communication tools available in Canvas.

**Academic Honesty:** ALL PORTIONS OF THE AUBURN UNIVERSITY HONESTY CODE FOUND ONLINE IN THE STUDENT POLICY eHANDBOOK WILL APPLY TO THIS CLASS. All violations or alleged violations of the Code will be reported to the Office for the Vice President for Academic Affairs.

**Special Accommodations for Students with Disabilities:** Auburn University is committed to providing accommodations and services to students with documented disabilities. Students who have questions or need special accommodations to participate in on-campus or distance education courses should contact The Program for Students with Disabilities, 1244 Haley Center, Auburn University, AL 36849; 334-844-2096 (Voice T/O); 334-844-2099 (Fax); email [haynemd@auburn.edu](mailto:haynemd@auburn.edu); URL: <http://www.auburn.edu/disability>.