



**Lee Business School**  
**Department of Management, Entrepreneurship and Technology**

## **DA 703 Applied Data Management**

Spring 2016

Instructor:

Office hours:       BEH 329  
                          By appointment only

Contact details:

### **Required Texts**

- Posted content on CourseWeb
- Harvard Business cases, link on CourseWeb

### **Course Description**

The primary purpose of this course is to provide you with a level of knowledge that allows you to be an effective manager in an organization, whether public or private. Subjects will include the theory, design, development, and management of information, primarily through the use of databases. Cases are used to illustrate many of these subject areas. The focus of the course is to provide managers tools and understanding so that they can better manage information within organizations.

Basic technical skills for database design and implementation are covered by the class; include Entity-Relationship modeling, normalization, and Structured Query Language. Coursework will also provide some of the basics in working with Big Data.

### **Course objectives**

- Understand key concepts of information and data management

- Beginner understanding of relational database design, normalization, implementation and querying via SQL
- Understand basic Big data concepts, and be able to collect and use big data at a rudimentary level
- Perform rudimentary data analysis and present findings

## Grading and Feedback

Student performance will be evaluated primarily on their ability to understand both the concepts of data management and its applications. Quizzes will be used to test the student’s conceptual knowledge and their ability to use this knowledge in realistic applications. Quizzes can include a mixture of true/false, multiple choice, short answer, and essay questions/problems. The majority of grades will always rely upon practical application of conceptual knowledge.

Submitted work will be graded based on the criteria stated for the assignment. Thoroughness and completeness is required to receive full marks. Late work is not accepted.

### Grading

Your final grade is based on a CUMULATIVE, WEIGHTED-POINT TOTAL (see distribution of points below). If you are not sure of your grade during the semester, I will provide an ESTIMATE since your actual grade cannot be determined until the end of the semester. Please keep your returned graded work until the end of the course.

Grade Components		Grade Scales	
Tech assignments (10)	20%	93.00 – 100.0	A
Final tech assignment	5%	90.00 – 92.99	A-
Case prep (6)	12%	87.00 – 89.99	B+
Group evaluation	3%	83.00 – 86.99	B
Class participation	5%	80.00 – 82.99	B-
Midterm	10%	77.00 – 79.99	C+
Data analysis project	10%	73.00 – 76.99	C
Client project	20%	70.00 – 72.99	C-
Final	15%	67.00 – 69.99	D+
		63.00 – 66.99	D
		60.00 – 62.99	D-
		00.00 – 59.99	F

## Class Prep

The readings for the class are required as background and survey information for the topic that will be discussed that day. Further, the cases are linked to these topics, as are the guest

speakers for that day. I thus assign the reading not so that I can go over it again with the class, but with the understanding that you understand some of the basics in that area. We can then go on to discuss some more advanced topics that were not in the readings, or covered by the guest speakers or cases.

In order to help incentivize you to read and to understand, prior to proceeding with my prepared material for the day, I will spend the first 15-30 minutes of the lecture time responding to questions regarding the reading for the day. As it is not expected that you will understand everything that you read for the entire semester, it is expected that you would provide at least four questions during the course of the semester. Questions will be collected by putting them on the whiteboard prior to the commencement of the lecture.

## Case Prep

Relevant cases from the Harvard Business School case library have been selected for this course. A link to purchase these cases will be made available via WebCampus.

In order to prepare for classroom discussion on the case, I will ask for two things for each case:

1. Prepare two questions about the case that can be used to drive class or group discussion on key issues of the case
2. Select one of the questions. Prepare arguments and evidence to either:
  - a. Support an answer to the question that is made (If a question)
  - b. Support arguments for the different sides of the debate that the question calls for

## Tech Assignments (Individual)

This class has diversity in regards to their technological skills. I have learned over the past five years of teaching this course that no one project fits all needs. Thus, this semester I will try to encourage your own development of a technological skill that you think is most needed for your career.

You will be required to complete some work regarding a tool or technology that you would like to learn or would be beneficial for your career. You will do this for ten weeks (excluding spring break). This way, you will be motivated to learn something that you have been wanting to learn, and you can do it at your own pace and skill level.

**YOU SHOULD BE SPENDING AT LEAST ONE HOUR FOR EACH TECH ASSIGNMENT!**

I would recommend that you use a reputable online source for your materials for these components if you do not have anything readily in mind to work on. Some good sources for tools related to data management are listed here, but you are also welcome to use your own based on the technology or topic that you are focused on:

- SQL

- [http://sqlzoo.net/wiki/Main\\_Page](http://sqlzoo.net/wiki/Main_Page)
- <http://www.w3schools.com/sql/>
- Big data:
  - <http://bigdatauniversity.com/>
  - <http://www.teradatauniversitynetwork.com/>
- DB2
  - <http://www-01.ibm.com/software/data/education/selfstudy.html>
- Access
  - <https://support.office.com/en-ca/article/Training-courses-for-Access-2013-a4bd10ea-d5f4-40c5-8b37-d254561f8bce>
- MySQL
  - [http://dev.mysql.com/usingmysql/get\\_started.html](http://dev.mysql.com/usingmysql/get_started.html)

Each week, you will need to submit summary of what you learned via WebCampus assignments posted as Tech #X. These summaries should include:

- Topic that you address with this assignment
- Source of content that you used
- Screenshot of complete objective
- One paragraph describing what you learned

Tech learning assignments are due as indicated on the schedule.

### **Final Tech Project**

For your final tech assignment, you should be able to produce some result that can demonstrate your learning. For example:

- A certificate for tool or language that you were learning
- PHP assignments -> PHP coding on a website that you create
- SQL assignments -> queries on a DB that you created
- Big data -> Some Big Data analytics
- Access / MySQL -> Creation of a DB

If you are unsure of how you can demonstrate your learning of your tech assignments in a project, please work with me prior to the end of the semester.

### **Tests**

The course will only use two tests: a midterm and a final.

The midterm will cover the basics of database design, entity-relationship diagramming and other concepts covered during the initial part of the course. It will also cover the second portion of the course which deals with general data management, compliance and security. Students should be prepared to apply classroom concepts into real-world situations. Two weeks will be given to complete this quiz due to spring break.

The final will be comprehensive and administered during the final week of the course. As presentations to clients will occur during the end of the semester, the final will not take place in-class.

***Final opt-out option.*** For those that approve a certificate in advance, successful completion of this certificate will provide you with a 100% pass on the final. These are more advanced certificates from well-known institutions. These must all be approved in advance.

## **Group Projects (Group)**

Students will self-organize into teams of 3 or 4 students. Unless the group experiences a significant problem, it is expected that the group will work on both group projects during this course.

There are two group projects during this course: Data Analysis project and a Client project. Please refer to WebCampus for project related information.

All members are expected to participate and contribute equally in the projects and will receive the same grade for the project. Students from the same team will receive the same grade towards the project, unless a written complaint is filed against a student by half or more of the team members for inadequate contribution towards the project. The peer review comments to the instructor are strictly confidential, and should be submitted prior to the completion of the project.

Project reports needs to be typed or printed. No hand-written report will be accepted. The report is due at the beginning of the class specified on the course schedule. No late reports will be accepted. Details of the term project will be provided on WebCampus.

## **Disclaimer**

As required, the course content and schedule may be changed at the instructor's discretion. Announcements made in class will over-ride any statement made here. All updates will be posted to the Calendar on WebCampus.

## **Calendar**

Please see Calendar tool on WebCampus

## Official UNLV Policies

**Academic Misconduct**—Academic integrity is a legitimate concern for every member of the campus community; all share in upholding the fundamental values of honesty, trust, respect, fairness, responsibility and professionalism. By choosing to join the UNLV community, students accept the expectations of the Student Academic Misconduct Policy and are encouraged when faced with choices to always take the ethical path. Students enrolling in UNLV assume the obligation to conduct themselves in a manner compatible with UNLV's function as an educational institution.

An example of academic misconduct is plagiarism. Plagiarism is using the words or ideas of another, from the Internet or any source, without proper citation of the sources. See the *Student Academic Misconduct Policy* (approved December 9, 2005) located at: <https://www.unlv.edu/studentconduct/student-conduct>.

**Copyright**—The University requires all members of the University Community to familiarize themselves with and to follow copyright and fair use requirements. **You are individually and solely responsible for violations of copyright and fair use laws. The university will neither protect nor defend you nor assume any responsibility for employee or student violations of fair use laws.** Violations of copyright laws could subject you to federal and state civil penalties and criminal liability, as well as disciplinary action under University policies. Additional information can be found at: <http://www.unlv.edu/provost/copyright>.

**Disability Resource Center (DRC)**—The UNLV Disability Resource Center (SSC-A 143, <http://drc.unlv.edu/>, 702-895-0866) provides resources for students with disabilities. If you feel that you have a disability, please make an appointment with a Disabilities Specialist at the DRC to discuss what options may be available to you. If you are registered with the UNLV Disability Resource Center, bring your Academic Accommodation Plan from the DRC to the instructor during office hours so that you may work together to develop strategies for implementing the accommodations to meet both your needs and the requirements of the course. Any information you provide is private and will be treated as such. To maintain the confidentiality of your request, please do not approach the instructor in front of others to discuss your accommodation needs.

**Religious Holidays Policy**—Any student missing class quizzes, examinations, or any other class or lab work because of observance of religious holidays shall be given an opportunity during that semester to make up missed work. The make-up will apply to the religious holiday absence only. It shall be the responsibility of the student to notify the instructor **within** the first 14 calendar days of the course for fall and spring courses (excepting modular courses), or **within** the first 7 calendar days of the course for summer and modular courses, of his or her intention to participate in religious holidays which do not fall on state holidays or periods of class recess. For additional information, please visit: <http://catalog.unlv.edu/content.php?catoid=6&navoid=531>.

**Transparency in Learning and Teaching**—The University encourages application of the transparency method of constructing assignments for student success. Please see these two links for further information:

<https://www.unlv.edu/provost/teachingandlearning>

<https://www.unlv.edu/provost/transparency>

**Incomplete Grades**—The grade of I—Incomplete—can be granted when a student has satisfactorily completed three-fourths of course work for that semester/session but for reason(s) beyond the student's control, and acceptable to the instructor, cannot complete the last part of the course, and the instructor believes that the student can finish the course without repeating it. The incomplete work must be made up before the end of the following regular semester for undergraduate courses. Graduate students receiving "I" grades in 500-, 600-, or 700-level courses have up to one calendar year to complete the work, at the discretion of the instructor. If course requirements are not completed within the time indicated, a grade of F will be recorded and the GPA will be adjusted accordingly. Students who are fulfilling an Incomplete do not register for the course but make individual arrangements with the instructor who assigned the I grade.

## Library Resources

Students may consult with a librarian on research needs. For this class, the subject librarian is available here: [https://www.library.unlv.edu/contact/librarians\\_by\\_subject](https://www.library.unlv.edu/contact/librarians_by_subject). UNLV Libraries provides resources to support students' access to information. Discovery, access, and use of information are vital skills for academic work and for successful post-college life. Access library resources and ask questions at <https://www.library.unlv.edu/>.

**Tutoring and Coaching**—The Academic Success Center (ASC) provides tutoring, academic success coaching and other academic assistance for all UNLV undergraduate students. For information regarding tutoring subjects, tutoring times, and other ASC programs and services, visit <http://www.unlv.edu/asc> or call 702-895-3177. The ASC building is located across from the Student Services Complex (SSC). Academic success coaching is located on the second floor of the SSC (ASC Coaching Spot). Drop-in tutoring is located on the second floor of the Lied Library and College of Engineering TEB second floor.

**UNLV Writing Center**—One-on-one or small group assistance with writing is available free of charge to UNLV students at the Writing Center, located in CDC-3-301. Although walk-in consultations are sometimes available, students with appointments will receive priority assistance. Appointments may be made in person or by calling 702-895-3908. The student's Rebel ID Card, a copy of the assignment (if possible), and two copies of any writing to be reviewed are requested for the consultation. More information can be found at: <http://writingcenter.unlv.edu/>.

**Rebelmail**—By policy, faculty and staff should e-mail students' Rebelmail accounts only. Rebelmail is UNLV's official e-mail system for students. It is one of the primary ways students receive official university communication such as information about deadlines, major campus events, and announcements. All UNLV students receive a Rebelmail account after they have been admitted to the university. Students' e-mail prefixes are listed on class rosters. The suffix is always [@unlv.nevada.edu](mailto:@unlv.nevada.edu). **Emailing within WebCampus is acceptable.**

**Final Examinations**—The University requires that final exams given at the end of a course occur at the time and on the day specified in the final exam schedule. See the schedule at: <http://www.unlv.edu/registrar/calendars>.