Lee Business School Department of Management, Entrepreneurship and Technology

MIS 766 Data Management

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
- 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	Α
Final tech assignment	5%	90.00 – 92.99	A-
Case prep (7)	12%	87.00 – 89.99	B+
Class participation	3%	83.00 – 86.99	В
Midterms (2)	20%	80.00 - 82.99	B-
Client project	20%	77.00 – 79.99	C+
Final	20%	73.00 – 76.99	С
		70.00 – 72.99	C-
		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..

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:

- SOL
 - o http://sqlzoo.net/wiki/Main_Page
 - o http://www.w3schools.com/sql/
- Big data:
 - http://bigdatauniversity.com/
 - o http://www.teradatauniversitynetwork.com/
- DB2
 - http://www-01.ibm.com/software/data/education/selfstudy.html
- Access
 - o 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

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 have two midterms and one final.

The first midterms will cover the basics of database design, entity-relationship diagraming and other concepts covered during the initial part of the course.

The second midterm will 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.

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. This cannot be double counted towards your final tech assignment.

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 University community. We 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 to always take the ethical path whenever faced with choices. Students enrolling at UNLV assume the obligation to conduct themselves in a manner compatible with UNLV's educational mission. An example of academic misconduct is plagiarism. Plagiarism is using the words or ideas of another person, from the Internet or any other source without proper citation of the source(s). See the Student Conduct Code, https://www.unlv.edu/studentconduct/student-conduct.

Auditing a Course

Auditing a course allows a student to continue attending the lectures and/or laboratories and discussion sessions associated with the course, but the student will not earn a grade for any component of the course. Students who audit a course receive the same educational experience as students taking the course for a grade, but will be excused from exams, assessments, and other evaluative measures that serve the primary purpose of assigning a grade.

Classroom Conduct

Students have a responsibility to conduct themselves in class and in the libraries in ways that do not interfere with the rights of other students to learn, or of instructors to teach. Use of devices such as cellular phones and pagers, or other potentially disruptive activities are only permitted with the prior explicit consent of the instructor. Students are specifically prohibited to record classes without instructor authorization, including online/remote classes (either audio only, or video and audio). The instructor may rescind permission at any time during the class. If a student does not comply with established requirements or obstructs the functioning of the class, the instructor may initiate an administrative withdrawal of the student from the course. Since the COVID-19 pandemic forced some instruction to be delivered remotely starting in Spring 2020, numerous students have asked instructors to record their synchronous classes, so that they can access them at their convenience. Instructors who agree to record their classes (audio only, or video and audio) should inform students in advance. Recorded lectures may not be broadly released to anyone, but made available exclusively to those students enrolled in the class during the particular academic term. Recorded lectures must be stored securely, and are subject to the Nevada System of Higher Education's Records Retention Policy, meaning that the recordings can only be deleted 120 days after the end of class (i.e., after grades are posted). Once this requirement is met, the recordings should be deleted. Class recordings are protected from disclosure, as they are deemed part of an educational record under the Family Educational Rights and Privacy Act (FERPA).

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 student or employee 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 copyright policy information is available at https://www.unlv.edu/provost/copyright.

Disability Resource Center (DRC)

The <u>UNLV Disability Resource Center</u> (Student Services Complex, SSC-A, Room 143, https://www.unlv.edu/drc, telephone 702-895-0866) provides resources for students with disabilities. Students who believe that they may need academic accommodations due to a permanent disability, temporary or permanent medical need, or academic support due to pregnancy are encouraged to contact the DRC as early as possible in the academic term. A Disabilities Specialist will discuss what options may be available to you. Students who are already registered with the DRC should request their accommodations online each semester, and make an appointment to discuss their accommodations with their instructors.

Final Examinations

The University requires that final exams given at the end of a course occur on the date and at the time specified in the Final Exam schedule. The Final Exam schedule is typically available at the start of the semester, and the classroom locations are available approximately one month before the end of the semester. See the Final Exam Schedule, https://www.unlv.edu/registrar/calendars.

Identity Verification in Online Courses

All UNLV students must use their Campus-issued ACE ID and password to log in to WebCampus-Canvas.

UNLV students enrolled in online or hybrid courses are expected to read and adhere to the <u>Student Academic Misconduct Policy</u>, https://www.unlv.edu/studentconduct/misconduct/policy, which states that "acting or attempting to act as a substitute for another, or using or attempting to use a substitute, in any academic evaluation or assignment" is a form of academic misconduct. Intentionally sharing ACE login credentials with another person may be considered an attempt to use a substitute, and could result in investigation and sanctions, as outlined in the Student Academic Misconduct Policy.

UNLV students enrolled in online courses are also expected to read and adhere to the <u>Acceptable Use of Computing and Information Technology Resources Policy</u>,

https://www.it.unlv.edu/policies/acceptable-use-computing-and-information-technology-resources-policy, which prohibits sharing university accounts with other persons without authorization.

To the greatest extent possible, all graded assignments and assessments in UNLV online courses should be hosted in WebCampus-Canvas or another UNLV-managed platform that requires ACE login credentials for access.

Incomplete Grades

The grade of "I" (Incomplete) may be granted when a student has satisfactorily completed three-fourths of course work for that semester/session, but cannot complete the last part of the course for reason(s) beyond the student's control and acceptable to the instructor, and the instructor believes that the student can finish the course without repeating it. For undergraduate courses, the incomplete work must be made up before the end of the following regular semester. 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 period indicated, a grade of "F" will be recorded, and the student's GPA will be adjusted accordingly. Students who are fulfilling an Incomplete grade do not register for the course, but make individual arrangements with the instructor who assigned the "I" grade.

Library Resources

Librarians are available to consult with students on research needs, including developing research topics, finding information, and evaluating sources. To make an appointment with a subject expert for this class, please visit the <u>Libraries' Research Consultation</u> website, https://guides.library.unlv.edu/appointments/librarian. You can also <u>ask the library staff</u> questions via chat and text message at https://ask.library.unlv.edu/.

Missed Classwork

Any student missing class, quizzes, examinations, or any other class or laboratory work because of observance of religious holidays will be given an opportunity during that semester to make up the missed work. The make-up opportunity will apply to the religious holiday absence only. It is the responsibility of the student to notify the instructor within the first 14 calendar days of the course for Fall and Spring courses (except for modular courses), or within the first 7 calendar days of the course for Summer and modular courses, of their intention to participate in religious holidays which do not fall on state holidays or periods of class recess. For additional information, please visit the Missed Classwork policy, under Registration Policies, on the <u>Academic Policies</u> webpage,

https://catalog.unlv.edu/content.php?catoid=32&navoid=8271&hl=.

In accordance with the policy approved by the Faculty Senate regarding missed class time and assignments, students who represent UNLV in any official extracurricular activity will also have the opportunity to make up assignments, provided that the student submits official written notification to the instructor no less than one week prior to the missed class(es).

The spirit and intent of the policy for missed classwork is to offer fair and equitable assessment opportunities to all students, including those representing the University in extracurricular activities. Instructors should consider, for example, that in courses which offer a "Drop one" option for the lowest assignment, quiz, or exam, assigning the student a grade of zero for an excused absence for extracurricular activity is both contrary to the intent of the Faculty Senate's policy, and an infringement on the student's right to complete all work for the course.

This policy will not apply in the event that completing the assignment or administering the examination at an alternate time would impose an undue hardship on the instructor or the University that could be reasonably avoided. There should be a good faith effort by both the

instructor and the student to agree to a reasonable resolution. When disagreements regarding this policy arise, decisions can be appealed to the Department Chair/School Director, College/School Dean, and/or the Faculty Senate Academic Standards Committee.

For purposes of definition, extracurricular activities may include, but are not limited to academic recruitment activities, competitive intercollegiate athletics, fine arts activities, liberal arts competitions, science and engineering competitions, and any other event or activity sanctioned by a College/School Dean, and/or by the Executive Vice President and Provost.

Rebelmail

Rebelmail is UNLV's official email system for students and by University policy, instructors and staff should only send emails to students' Rebelmail accounts. Rebelmail is one of the primary ways in which students receive official University communications, information about deadlines, major Campus events, and announcements. All UNLV students receive a Rebelmail account after they have been admitted to the University. Sending emails within WebCampus-Canvas is also acceptable.

Tutoring and Coaching

The Academic Success Center (ASC), at the Claude I. Howard Building, 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, please visit the <u>ASC website</u>, https://www.unlv.edu/asc, or call 702-895-3177. The ASC is located across from the Student Services Complex (SSC). Academic success coaching is located on the second floor of SSC A, Room 254. Drop-in tutoring is located on the second floor of the Lied Library, and on the second floor of the College of Engineering building (TBE A 207).

UNLV Writing Center

One-on-one or small group assistance with writing is available free of charge to UNLV students at the Writing Center, https://writingcenter.unlv.edu/, located in the Central Desert Complex, Building 3, Room 301 (CDC 3–301). Walk-in consultations are sometimes available, but students with appointments receive priority assistance. Students may make appointments in person or by calling the Center, telephone 702-895-3908. Students are requested to bring to their appointments their Rebel ID Card, a copy of the instructions for their assignment, and two copies of any writing they have completed on their assignment. *Optional statement for inclusion in syllabi*.

Diversity Statement

As an institution of higher learning, UNLV represents a rich diversity of human beings among its faculty, staff, and students, and is committed to aspiring to maintain a Campus environment that values that diversity. Accordingly, the University supports understanding and appreciation of all members of its community, regardless of race, sex, age, color, national origin, ethnicity, creed, religion, disability, sexual orientation, gender, gender identity, marital status, pregnancy, genetic information, veteran status, or political affiliation. Please see University Statements and Compliance, https://www.unlv.edu/about/statements-compliance.

A successful learning experience requires mutual respect and trust between the students and the instructor. Accordingly, the instructor asks that students be willing to listen to one another's points of view, acknowledging that there may be disagreements, keep discussion and comments on topic, and use first person, positive language when expressing their perspectives.