

MIS 776 - Business Intelligence - Spring 2017

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| Department of | Management, Entrepreneurship, and Technology |
| College of | Lee Business School |
| Course Location: | CBC C129 |
| Class Meeting Days & Times: | Tuesdays 7:00 P.M. – 9:45 P.M. |
| Course Abbreviation/ Number/ Section | MIS 776 (Business Intelligence); course number: 23923 |
| Prerequisites: | Graduate Standing |
| Required Text: | <ul style="list-style-type: none"> • <u>Business Intelligence and Analytics: Systems for Decision Support, 10/e</u> * Sharda, Delen & Turban ©2015 Prentice Hall Cloth; 688 pp Available ISBN-10: 0133050904 ISBN-13: 9780133050905 *Referred to as SDT henceforth • Data Mining for the Masses by Mathew North (NOTE: You <u>do not</u> have to buy this book. It is freely available for download at the following link. We will mainly use this for our hands on work. http://globaltext.terry.uga.edu/booklist?cat=Computing) • Other material may be assigned as required |
| Access to Learning Resources: | <ul style="list-style-type: none"> • UNLV Library: phone: (702) 895-2286; web: http://library.nevada.edu/ • University Bookstore: phone: (702)736-3955; web: http://unlv.bncollege.com/webapp/wcs/stores/servlet/BNCBHomePage?storeId=19074&catalogId=10001 • Teradata Student Network: http://www.teradatauniversitynetwork.com/ Password for Registration: Analytics |
| Course Overview: | |
| Skills, technologies, applications, and practices to leverage the organization's' internal and external information assets for making intelligent business decisions in data-rich organizations. This course illuminates the relevance of information technology (IT) in organizational problem solving and/or decision making. Topics include decision making, decision support systems, text/data mining, data warehousing, and business performance management. | |
| Learning Outcomes of this course | |
| At the end of this course, the student will (class learning objectives): | |
| 1 | Understand the criticality of human decision making and business intelligence to today's business organizations |
| 2 | Understand basic concepts/technologies/techniques underlying business intelligence and human/organizational decision making |
| 3 | Apply/Implement business intelligence concepts using one or more tool(s). |

Grade Determination:

| | | | |
|-------------------|----------------|----------------|----------------|
| A ($\geq 93\%$) | A- (90-92.99%) | B+ (87-89.99%) | B (83-86.99%) |
| B- (80-82.99%) | C+ (76-79.99%) | C (72-75.99%) | C- (70-71.99%) |
| D+ (66-68.99%) | D (62-65.99%) | D- (60-61.99%) | F ($< 60\%$) |

Note: Final decimal percentages will be rounded off to the nearest integer before calculating the letter grades. For example, if the final course percentage is 92.8, it will be rounded off to 93% and the student will receive an A. Again, if the final course percentage is 92.2, it will be rounded off to 92% and the student will receive an A-.

Web Campus

The course shall use the web campus portal. This portal will have the resources related to the course, e.g. powerpoints, reading materials, posted syllabus, assignments etc.

You will be required to log-in into this portal to access your course

Class Attendance and Assignments

- There shall be class assignments (see course calendar) that will be assigned, completed, and submitted during regular class hours and/or on the same day as classes.
- All class assignments are individual
- If you miss a class assignment, you will need to provide a **valid and documented** excuse to make up, similar to the exam policy noted below.

If you do not provide a valid excuse with proper documentation, you will not be able to get credit and/or make up the missed assignment.

Exams and Exam Policy

There are 2 exams: the mid-term and the final.

- All scheduled exams will be taken on computers in the classroom.
- The exams are closed books and closed notes.
- Exams may have MULTIPLE-CHOICE/TRUE FALSE/FILL IN THE BLANK questions, OPEN ENDED ESSAY-TYPE questions, as also hands-on assignment questions (or any combination of these)
- Examinations will be administered during the scheduled days (please check course calendar) in class via webcampus.
- All exams are individual components.

Do not miss any exam. *If you miss an exam without a valid excuse, then your grade in that exam will be zero.* If an exam is missed, it is the student's responsibility to (a) contact the professor as soon as possible via email, or telephone, (b) produce a document describing the valid reason for having missed the exam. Examples of valid excuses are serious illness and participation in University sponsored events. If you miss an exam due to illness, a written excuse from a doctor is necessary. When you have to miss an exam due to participation in a University sponsored event, you must inform me prior to the exam and submit appropriate documentation to verify your claim. When you miss an exam for a valid reason, contact your professor with **valid documentation** within 7 days of the missed test. Your grade for that exam will be determined based on your average score from other exams. Only one missed exam may be substituted in this manner with valid excuse as indicated above. ***No makeup exams are ordinarily given.***

Term Project

- The Term Paper is a group-based assignment.
- Grading is team-based for this assignment.
- In this assignment you are required to work in teams of max 4 members to investigate/work on any topic related to business intelligence. (You can choose any business discipline such as Marketing, Management, Finance etc.).
- Your investigation will be in the form of a term paper.
- You will also present it (as a group) in a 15 minute presentation (including 3 minutes for Q&A).
- Full points for this paper (including the presentation) would be 100.
- The paper should be around 3000 words.

There is considerable flexibility in what can be done, and I encourage you to be creative. You are welcome to:

- give state-of-the-art analyses
- compare BI products in the market and make recommendations
- present a case study
- give an update and analysis on current BI practices
- work on a live project and create a BI solution and present your solution which you discuss in the term paper.

Please note that the paper should not be descriptive. It should be analytical, that is you should try to present some sort of original thoughts in the form of synthesis, recommendations, critique, BI solutions (in case of a live project).

Ideally, a paper that receives a high grade (A) is one that can be potentially submitted or published at a journal/conference.

You are welcome to write up an abstract and run it by me for feedback. (See the optional abstract submission deadline in the schedule)

Possible topics for your term project may include (you are welcome to research on additional topics related to BI).

- Big Data
- Managing unstructured data
- Text mining
- Knowledge management in BI
- In-memory Analytics/In database Analytics
- Active data warehousing
- Mobile BI
- Social BI
- Privacy and BI
- Data visualization

Using warehousing/BI to measure business performance

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>.

Student academic appeals policy

Authority and responsibility for assigning grades to students rests with the faculty. However, in those instances where students believe that miscommunication, errors, or unfairness of any kind may have adversely affected the instructor's assessment of their academic performance the student has a right to appeal by the procedure listed in the Catalog and by doing so within thirty days of receiving the grade or experiencing any other problematic academic event that prompted the complaint.

Disability Resource Center

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>.

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.

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. **Emailing within WebCampus is acceptable.**

Library

Students may consult with a librarian on research needs. For this class, the subject librarian is 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/>.

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/>.

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.

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>.

COURSE CALENDAR (Subject to change depending on our progress in the class)

| WK | Date | Day | Topic | Material/Assignments |
|----|----------|-----|--|--|
| 1 | Jan 17 | T | Syllabus and Introduction | |
| 2 | Jan 24 | T | SDT Chapter 1: Overview of Business Intelligence, Analytics, and Decision Support | |
| 3 | Jan 31 | T | SDT Chapter 2: Foundations and Technologies for Decision Making | Quiz 1 (Chap 1) |
| 4 | Feb 7 | T | SDT Chapter 4: Business Reporting, Visual Analytics, and Business Performance Management | Quiz 2 (Chap 2-4) |
| 5 | Feb 14 | T | Exam 1 (Chap 1,2,4) | |
| 6 | Feb 21 | T | BI Visualization Tools: SAS Visual Analytics/Tableau | Deadline for groups to be formed |
| 7 | Feb 28 | T | BI Visualization Tools: SAS Visual Analytics/Tableau | Assignment 1 |
| 8 | Mar 7 | T | BI Visualization Tools: SAS Visual Analytics/Tableau | Assignment 2 |
| 9 | Mar 14 | T | BI Visualization Tools: SAS Visual Analytics/Tableau | Assignment 3 |
| 10 | Mar 21 | T | SDT Chapter 5/7: Data and Text Mining | Deadline for Abstract Submission (OPTIONAL) |
| 11 | Mar 28 | T | BI Mining Tools: Rapidminer | Quiz 3 (Chap 5-7) |
| 12 | Apr 4 | T | BI Mining Tools: Rapidminer | Assignment 4 |
| 13 | Apr 11 | T | Holiday Spring Break | |
| 14 | Apr 18 | T | BI Application Tools: Teradata marketing Applications | |
| 15 | April 25 | T | BI Application Tools: Teradata marketing Applications | Assignment 5 |
| 16 | May 2 | T | SDT Chapter 13: Big Data and Analytics/ Presentations | Quiz 4; Term Project Due |
| 17 | May 9 | T | Final Exam Date and Time 8:10pm to 10:10pm Tues. May 9 | |

