Naveen Jindal School of Management

MIS 6320.001-ACCT 6320.001-BUAN 6320.001-OPRE 6393.001
Database Foundations
Fall 2016

Professor: **Huseyin Cavusoglu, Ph.D.**
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Class Hours: Thursday 1:00 - 3:45 p.m. (JSOM 2.106)
My Office Hour: Wednesday 5:30 - 6:30 p.m. (JSOM 3.418)
TA Office Hour: Thursday 5:00-6:00 pm (JSOM 14.315)

Textbook

> ***Modern Database Management*** (Eleventh Edition) by J. A. Hoffer, R. Venkataraman, and H. Topi, Pearson Education, 2013, ISBN-10: 0132662256 • ISBN-13: 9780132662253.
> ***OR***
> ***Essentials of Database Management*** (First Edition) by J. A. Hoffer, H. Topi, and R, Venkataraman, Pearson Education, 2013, ISBN-10: 0133405680 • ISBN-13: 000-0133405680.
>
> Both textbooks are the same in terms of the chapters we will cover in class. The first book is more comprehensive and includes chapters on more advanced database topics.

Course Description

This course is designed to provide database knowledge for non-MIS business students to function effectively in their functional area. The course introduces the basic concepts of relational databases. The emphasis is on relational database structure and the use of relational databases for query retrievals and report generation. Structured Query Language (SQL) will be covered extensively. Applications of databases for accounting, marketing, and other areas of business will also be discussed.

Other topics covered include entity-relationship data model, data planning, data administration, SQL, relational theories, database development project, data warehouses.

Student Learning Outcomes

- Creating a conceptual data model when requirements are provided
- Converting a conceptual data model into a physical relational database structure
- Writing SQL statements using Oracle or other similar relational database platform
- Designing and creating a database using Oracle or other similar relational database platform

Software Tools

- **Oracle Application Express (APEX)–** a web-based application development environment that runs on an Oracle database. We will use the SQL Workshop tool to create databases and to run queries against databases. You will get your free workspace without any download or installation. You can access it at https://apex.oracle.com/en/

Lecture Notes

All lecture notes will be made available online as PowerPoint slides or PDF files on the eLearning course site.

Readings

For the most part I will follow the textbook. You are advised to read the chapters in advance if you feel that you cannot keep up with the pace in the class.

Assignments and Groups

There will be 5 (0-4) assignments. Assignment 0 description is given below. The rest of the assignments (1-4) will be posted on the course website. Each assignment must be submitted at the beginning of the class period in which it is due. Late submission of assignments will be penalized by the reduction of the grade by **25%** for each late day. A penalty of **25% of the assignment value per day** (including weekends) is assessed on late assignments beginning on the day due.

Students are required to do the assignments in groups of 5 or less. Assignments are very involved and will demand time, so it is my recommendation that you work in groups. However, inter-group collaboration is **NOT** allowed and will be penalized according to the academic honesty guidelines of the University of Texas at Dallas. Solely the group members should do the work submitted by each group. It is your responsibility to familiarize yourselves with the academic honesty guidelines of the University of Texas at Dallas. A brief summary of these guidelines is provided at the end of this syllabus.

Each group needs to submit only one (soft) copy of the assignment (except assignment 0) through the eLearning course site. However, you should provide the names of all group members on the material turned in. You will **NOT** be able to add a new group member once an assignment is turned in.

Forming your Group (Assignment 0)

Form your group as soon as you reasonably can. Only one member from each group should send an e-mail to the instructor**.** The e-mail should list the names and emails of all the members of the group, including the email sender.

Exams

There will be 3 exams and these exams are not cumulative. Each exam will be in-class, closed-notes and closed-book. The questions on the exams will be taken from the assigned readings of texts, class lectures and assignments. Exams may consist of short essay, short answer, problem solving, true/false, multiple-choice type questions. Some parts of the exam will be machine graded. You will need to bring a Scantron to each exam, form 882-E (small green form). No other type of Scantron forms will be

acceptable. No makeup exams will be offered, so plan ahead for the exam dates. The exam dates are listed on the course schedule (see the last page of the syllabus).

Grading

Grades will be calculated according to the following weights (tentative, subject to change)

	Individual Weight	Total Weight
Assignment 0	1 %	1 %
Class Participation	3%	3%
Assignments 1-4	6 %	24 %
Exams	24 %	72 %
Total		**100 %**

Based on the total weighted score you accumulate throughout the semester (i.e., your semester average), letter grades will be assigned as follows (subject to change):

Semester Average	Letter Grade
92-100	A
88-92	A-
84-88	B+
80-84	B
76-80	B-
72-76	C+
68-72	C
0-68	F

Course Policies

Class Website and Communications with the Instructor and the TA

Both access to the course material and communications with the instructor and the TA will be possible *exclusively* through e-Leaning site at http://elearning.utdallas.edu. To access eLearning you will need a UTD NetID and a password.

If you have any problem with your UTD NetID account, please contact assist@utdallas.edu or call the student help desk at 972-883-2911. Please make sure you are good to go from day one!

Laptops and Other Equipment Use in Class

If you bring a laptop or a tablet to the class, make sure you are using it properly for our class purposes. Playing games, socializing online (FB, Twitter, etc.), checking for latest scores, listening to music (no headphones in class), watching videos, doing homework for another class are examples of **improper** use. If you are not sure whether what you are doing is proper or not, ask me. All these uses not only bother me personally but also distract the students in class (especially those behind you who can see

your actions). Please note that by using your laptop improperly in class, you relinquish your right to be "offended" in case I warn you publicly in class.

Classroom Rules and Etiquette

If you come in late, please enter quietly. If you must leave early, I appreciate the courtesy of being notified in advance. Cell phones should either be turned off or placed in a quiet state (vibrate) during class. If your cell phone cannot be placed in a quiet state, please turn it off. Students will not be excused during an exam to answer cell phone calls.

Student Conduct and Discipline

The University of Texas System and The University of Texas at Dallas have rules and regulations for the orderly and efficient conduct of their business. It is the responsibility of each student and each student organization to be knowledgeable about the rules and regulations, which govern student conduct and activities. General information on student conduct and discipline is contained in the UTD publication, *A to Z Guide*, which is provided to all registered students each academic year.

The University of Texas at Dallas administers student discipline within the procedures of recognized and established due process. Procedures are defined and described in the *Rules and Regulations, Board of Regents, The University of Texas System, Part 1, Chapter VI, Section 3*, and in Title V, Rules on Student Services and Activities of the university's *Handbook of Operating Procedures*. Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations (SU 1.602, 972/883-6391).

A student at the university neither loses the rights nor escapes the responsibilities of citizenship. He or she is expected to obey federal, state, and local laws as well as the Regents' Rules, university regulations, and administrative rules. Students are subject to discipline for violating the standards of conduct whether such conduct takes place on or off campus, or whether civil or criminal penalties are also imposed for such conduct.

Academic Integrity

The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrates a high standard of individual honor in his or her scholastic work.

Scholastic dishonesty includes, but is not limited to, statements, acts or omissions related to applications for enrollment or the award of a degree, and/or the submission as one's own work or material that is not one's own. As a general rule, scholastic dishonesty involves one of the following acts: cheating, plagiarism, collusion and/or falsifying academic records. Students suspected of academic dishonesty are subject to disciplinary proceedings.

Plagiarism, especially from the web, from portions of papers for other classes, and from any other source is unacceptable and will be dealt with under the university's policy on plagiarism (see general catalog for details). This course will use the resources of turnitin.com, which searches the web for possible plagiarism and is over 90% effective.

Withdrawal from Class

The administration of this institution has set deadlines for withdrawal of any college-level courses. These dates and times are published in that semester's course catalog. Administration procedures must be followed. It is the student's responsibility to handle withdrawal requirements from any class. In other words, I cannot drop or withdraw any student. You must do the proper paperwork to ensure that you will not receive a final grade of "F" in a course if you choose not to attend the class once you are enrolled.

Student Grievance Procedures

Procedures for student grievances are found in Title V, Rules on Student Services and Activities, of the university's *Handbook of Operating Procedures*.

In attempting to resolve any student grievance regarding grades, evaluations, or other fulfillments of academic responsibility, it is the obligation of the student first to make a serious effort to resolve the matter with the instructor, supervisor, administrator, or committee with whom the grievance originates (hereafter called "the respondent"). Individual faculty members retain primary responsibility for assigning grades and evaluations. If the matter cannot be resolved at that level, the grievance must be submitted in writing to the respondent with a copy of the respondent's School Dean. If the matter is not resolved by the written response provided by the respondent, the student may submit a written appeal to the School Dean. If the grievance is not resolved by the School Dean's decision, the student may make a written appeal to the Dean of Graduate or Undergraduate Education, and the deal will appoint and convene an Academic Appeals Panel. The decision of the Academic Appeals Panel is final. The results of the academic appeals process will be distributed to all involved parties.

Incomplete Grades

As per university policy, incomplete grades will be granted only for work unavoidably missed at the semester's end and only if 70% of the course work has been completed. An incomplete grade must be resolved within eight (8) weeks from the first day of the subsequent long semester. If the required work to complete the course and to remove the incomplete grade is not submitted by the specified deadline, the incomplete grade is changed automatically to a grade of F.

Disability Services

The goal of Disability Services is to provide students with disabilities educational opportunities equal to those of their non-disabled peers. Disability Services is located in room 1.610 in the Student Union. Office hours are Monday and Thursday, 8:30 a.m. to 6:30 p.m.; Tuesday and Wednesday, 8:30 a.m. to 7:30 p.m.; and Friday, 8:30 a.m. to 5:30 p.m.

The contact information for the Office of Disability Services is:
The University of Texas at Dallas, SU 22
PO Box 830688, Richardson, Texas 75083-0688, (972) 883-2098 (voice or TTY)

Essentially, the law requires that colleges and universities make those reasonable adjustments necessary to eliminate discrimination on the basis of disability. For example, it may be necessary to remove classroom prohibitions against tape recorders or animals (in the case of dog guides) for students who are blind. Occasionally an assignment requirement may be substituted (for example, a research paper versus an oral presentation for a student who is hearing impaired). Classes enrolled

students with mobility impairments may have to be rescheduled in accessible facilities. The college or university may need to provide special services such as registration, note-taking, or mobility assistance.

It is the student's responsibility to notify his or her professors of the need for such an accommodation. Disability Services provides students with letters to present to faculty members to verify that the student has a disability and needs accommodations. Individuals requiring special accommodation should contact the professor after class or during office hours.

Religious Holy Days

The University of Texas at Dallas will excuse a student from class or other required activities for the travel to and observance of a religious holy day for a religion whose places of worship are exempt from property tax under Section 11.20, Tax Code, Texas Code Annotated.

The student is encouraged to notify the instructor or activity sponsor as soon as possible regarding the absence, preferably in advance of the assignment. The student, so excused, will be allowed to take the exam or complete the assignment within a reasonable time after the absence: a period equal to the length of the absence, up to a maximum of one week. A student who notifies the instructor and completes any missed exam or assignment may not be penalized for the absence. A student who fails to complete the exam or assignment within the prescribed period may receive a failing grade for that exam or assignment.

If a student or an instructor disagrees about the nature of the absence [i.e., for the purpose of observing a religious holy day] or if there is similar disagreement about whether the student has been given a reasonable time to complete any missed assignments or examinations, either the student or the instructor may request a ruling from the chief executive officer of the institution, or his or her designee. The chief executive officer or designee must take into account the legislative intent of TEC 51.911(b), and the student and instructor will abide by the decision of the chief executive officer or designee.

Course Schedule (Tentative)

The most up-to-date version of the academic calendar and the course outline given below will be posted as a separate file on eLearning. You should use the following until the first change is made.

Date	Lecture	Material	Assignment Due
August 25	**Overview of the Course** **The Database Environment**	Chapter 1 Lecture Notes	
September 1	**Conceptual Data Modeling** **The Entity-Relationship Model**	Chapter 2 Lecture Notes	
September 8	**Conceptual Data Modeling** **The Enhanced Entity-Relationship Model**	Chapter 3 Lecture Notes	**Assignment 0**
September 15	**Review and Practice Session I**	Chapters 1,2,3 Lecture Notes	
September 22	**EXAM 1**		**Assignment 1**
September 29	**Logical Database Design** **The Relational Model**	Chapter 4 Lecture Notes	
October 6	**Structured Query Language (SQL)**	Chapter 6 Lecture Notes	
October 13	**Structured Query Language (SQL)**	Chapter 6 Lecture Notes	**Assignment 2**
October 20	**Review and Practice Session II**	Chapters 4,6 Lecture Notes	
October 27	**EXAM 2**		
November 3	**Advanced SQL**	Chapter 7 Lecture Notes	**Assignment 3**
November 10	**Advanced SQL**	Chapter 7 Lecture Notes	
November 17	**Review and Practice Session III**	Chapter 7 Lecture Notes	
November 24	**Thanksgiving Break – NO CLASS**		**Assignment 4**
December 1	**EXAM 3**		