



Course BUAN/ACCT 6320.002: Database Foundations
Professor Ravi Narayan (Ravi)
Term Fall 2016
Meetings Tuesdays: 4pm – 6:45pm JSOM 2.801

Professor's Contact Information

Office Phone 972-883-5999
Office Location JSOM 3.709
Email Address r.narayan@utdallas.edu
Office Hours Mondays: 6pm – 7pm

General Course Information

Pre-requisites, Co-requisites, & other restrictions None

Course Description

The course provides database knowledge for non-MIS business students to function effectively in their functional area. The course covers conceptual data modeling with the entity-relationship diagram, the fundamentals of relational data model and database queries, and the basic concepts of big data. Structured Query Language will be used extensively. May not be used to fulfill degree requirements in MS Information Technology and Management. Credit cannot be received for both courses, [MIS 6320](#) and [MIS 6326](#). (3-0) Y

Learning Outcomes

1. Understand relational database concepts
2. Understand entity-relationship modeling and its role in database design
3. Manipulate data in a database using the SQL language
4. Understand data management in various contexts: data warehousing, big data, machine learning

Recommended Texts & Materials

1. Richard T Watson, *Databases and Organizations, 6th Edition*, ©2013-2016; Prospect Press; ISBN: 978-1943153039. You can purchase the Kindle version as well if you prefer.

The Course will be a combination of lectures, conceptual discussions, guest lectures, case analysis and panel discussion. Experience sharing sessions with practitioners will be organized. The students are expected to come prepared with the readings, analysis of cases, assigned for particular sessions.

Required Equipment

You will need a laptop from the first day of class. While any operating system is fine, it is recommended that the laptop have at least 8GB of ram and about 100MB hard disk space available.

Assignments & Academic Calendar

| Time Period | Topics Covered |
|------------------|--|
| Aug 22 – Sept 27 | Data Modeling and SQL |
| Oct 4 | A quick look at NoSQL and MongoDB |
| Oct 11 – Nov 15 | Big Data Characteristics Hadoop and MapReduce Pig and Hive |
| Week of Nov 22 | Break |
| Nov 29 | Panel Discussion and Review |
| Dec 6 | Final Exam and Closing Thoughts |

Grading Criteria

| | |
|-------------------------|------------|
| ➤ Assignments | 20 points |
| ➤ Quizzes: | 30 points |
| ➤ Exams: | 40 points |
| ➤ Class Participation : | 10 points |
| ➤ TOTAL | 100 points |

Grading Policy

| Scaled Score | Letter Equivalent |
|------------------|-------------------|
| >= 93 | A |
| >= 90.0 and < 93 | A- |
| >= 87 and < 90 | B+ |
| >= 83 and < 87 | B |
| >= 80 and < 83 | B- |
| >= 77 and < 80 | C+ |
| >= 73 and < 77 | C |
| Less than 73 | F |

Course Policies

| | |
|------------------------------|---|
| Make-up Exams | None |
| Extra Credit | None |
| Late Work | Will not be accepted; assignments are due at the beginning of the class they are due. |
| Special Assignments | None |
| Class Attendance | Class attendance and participation will be 10% of the grade – students are expected to actively discuss their viewpoints in class, participate in online discussions and make presentation(s) in class |
| Classroom Citizenship | <p>Meaningful Class Participation: You are expected to actively participate in the discussion of readings, contribute to the learning experience of the class, and meaningfully contribute to all group project work. A peer evaluation will be performed to assess group project participation.</p> <p>Respect and Dignity: At UT Dallas we appreciate and foster the many advantages that come from working in a diverse community where everyone is treated equitably, with dignity and respect. The University of Texas at Dallas is committed to providing</p> |

| | |
|-----------------------------------|---|
| | <p>an educational, living and working environment that is welcoming, respectful and inclusive of all members of the university community. An environment that is free of discrimination and harassment allows members of the university community to excel in their academic and professional careers. To that end, to the extent provided by applicable federal and state law, the University prohibits unlawful discrimination against a person because of their race, color, religion, sex (including pregnancy), national origin, age, disability, genetic information, or veteran status. The University's commitment to equal opportunity extends its nondiscrimination protections to include sexual orientation, gender expression and gender identity.</p> <p>Students are expected to recognize and respect a diversity of backgrounds and opinions among their fellow students. They should demonstrate respect for all students as an individual, recognizing that students may bring differing backgrounds, opinions and insights into the classroom.</p> |
| eLearning | <p>eLearning will be used for class content (e.g., class slides and assignment descriptions) and the recording of grades. Slides will be posted in eLearning before class is held. Class announcements (e.g., change in assignment dates) will be sent to the student email on record in eLearning. It is the students' responsibility to regularly check their UT Dallas email accounts.</p> |
| Instructor Response Policy | <p>The instructor will respond to all student inquiries (emails, voice messages, etc.) within 48 hours (excluding holidays and weekends).</p> |
| Scholastic Honesty | <p>The University is committed to academic excellence and expects academic honesty from all members of the University community and believes that it is essential for academic excellence and integrity. Academic honesty includes adherence to guidelines established by the instructor in a particular course for both individual and group work. It prohibits representing the work of others to be one's own (plagiarism); receiving unauthorized aid on an assignment (cheating); and using similar papers or other work products to fulfill the obligations of different classes without the instructor's permission. Penalties for academic dishonesty may include a grade of "F" on the work in question or for the course. In addition, any student engaged in academic dishonesty will be subject to disciplinary action. Please refer to the UT Dallas Syllabus Policies and Procedures website (see below) for detailed information pertaining to academic dishonesty, including procedures for determining disciplinary action.</p> <p>All students are expected to maintain a high level of responsibility with respect to academic honesty. Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the University. Since such dishonesty harms the individual, all students and the integrity of the University, policies on scholastic dishonesty will be strictly enforced.</p> |
| Course Evaluation | <p>As required by UTD academic regulations, every student must complete an evaluation for each enrolled course at the end of the semester. An online instructional assessment form will be made available for your confidential use. A link to an online instructional assessment form will be emailed to you for your confidential use.</p> |
| Comet Creed | <p><i>This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:</i></p> |

| | |
|---|---|
| | <i>“As a Comet, I pledge honesty, integrity, and service in all that I do.”</i> |
| UT Dallas Syllabus Policies and Procedures | <p><i>The information contained in the following link constitutes the University’s policies and procedures segment of the course syllabus. Please go to http://go.utdallas.edu/syllabus-policies for policies regarding</i></p> <ul style="list-style-type: none"> • <i>Technical Support</i> • <i>Student Conduct and Discipline</i> • <i>Academic Integrity</i> • <i>AccessAbility Services and Disability-Related Accommodations and/or Services</i> • <i>Class Attendance</i> • <i>Copyright Notice</i> • <i>Email Use</i> • <i>Field Trip Policies, Off-Campus Instruction and Course Activities</i> • <i>Incomplete Grade Policy</i> • <i>Religious Holy Days</i> • <i>Resources to Help You Succeed</i> • <i>Student Grievance Procedures</i> • <i>Withdrawal from Class</i> |

These descriptions and timelines are subject to change at the discretion of the Professor.