UTD

Course	ITSS 4301 Database Fundamentals
Instructor	Dawn Owens
Term	Fall 2016
Meetings	M/W, 8:30-9:45 a.m., JSOM 1.102

Instructor Dr. Dawn Owens

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Office Hours Mon/Wed. 11:30 AM – 2:00 PM;
Tues. 4:30 PM – 6:30 PM;

Schedule an appointment: http://dr-owens.genbook.com

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Prerequisites

Prerequisites: ITSS 3300 and ITSS 3312
Corequisite: ITSS 4330

Course Description

Introduces the basic concepts for the design and development of relational databases and database management. Topics include entity-relationship data model, logical database design, data administration, Structured Query Language, and database management issues, such as concurrency control, data security, and integrity. A database management system software package is used to implement working database systems. (3 semester hours)

Learning Outcomes

1. Create a conceptual data model when requirements are provided.
2. Convert a conceptual data model into a physical relational database structure.
3. Write SQL statements using SQL Server or other similar relational database platform.
4. Design and create a database using SQL Server or other similar relational database platform.
5. Demonstrate understanding of database management concepts relating to concurrency, security, and transaction management.

Required Texts & Materials

Object-Oriented Systems Analysis and Design: An Object Oriented Approach with UML by Denis, Wixom, and Tegarden, Wiley, Fifth Edition, 2015.

Recommended: *Information Technology Project Management* by Kathy Schwalbe, Cengage Learning, 7th Edition.
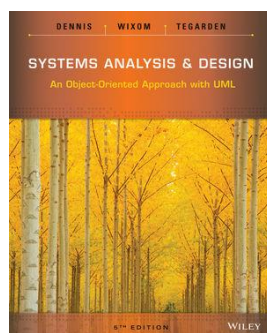
Assignment Guidelines

- All reading is to be completed before class on the date posted.
- All assignments must be submitted at the beginning of class.   Late assignments are **NOT** accepted.
- Written assignments must adhere to the APA style guide of formatting, citing, and referencing.
- Descriptions of assignments will be posted as they are assigned.
- **No extra credit assignments are available.**
- General grading criteria can be found in eLearning. Assignment specific grading criteria will be included with the assignment instructions.
- **All assignments will be submitted via eLearning. I do *NOT* accept assignments via email. If you submit an incorrect assignment or need to resubmit your assignment in eLearning you will be allowed to resubmit as long as it is before the due date. Send me an email 12 hours prior to the due date and I will clear your submission. Upon doing so, you will be able to resubmit.**
- **DO NOT CHEAT and DO NOT PLAGIARIZE. All homework and exams are to be individual efforts. You are not to collaborate with other students, or to discuss homework or assignments with other students prior to submission. Copying of homework, assignments, or exams, in whole or in part, from other students or from assignments from previous semesters will be considered to be an act of academic dishonesty.**
- You are encouraged to ask questions, raise issues and make observations about homework; please be advised that if you have a question or issue with your assignment grade, your entire assignment is subject to re-review (re-grading) which may or may not result in additional point deductions.

Grading

This course will feature a mix of activities and written and verbal assignments that may be in class or on campus. Homework will include readings from the text, assignments, and activities that usually require the student to complete some type of task. The instructor will provide detailed instructions as well as the grading criteria for each assignment. Please consult the course schedule for deadlines. Your grade will be based on the total score of the following:

Grade Component		Final Point Total	Letter Grade
Assignments		A	93-100
Exams		A-	90-92
Group Project		B+	87-89
Attendance		B	83-86
Class Participation		B-	80-82
		C+	77-79
		C	73-76
		C-	70-72
		D+	67-69
		D	63-66
		D-	60-62
		F	59 & below

Course & Instructor Policies

eLearning will be used for class content (e.g., class slides and assignment descriptions) and the recording of grades. Slides will be posted in 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 email accounts.

Instructor Response Policy: The instructor will respond to all student inquiries (emails, voice messages, etc.) within 48 hours (excluding holidays and weekends).

Exams: All exams are scheduled well in advance. If you miss an exam, you will be given a zero! There are no makeups. If you have a legitimate, non-academic reason for missing an exam, you must contact me by email or phone BEFORE the exam starts. **If you contact me AFTER the exam, it is considered missing the exam.**

Attendance Policy: Attendance is extremely important. Students are expected to attend all classes in order to achieve maximum success. Attendance will be taken and used in consideration for the Participation grade; however, this grade will also reflect the instructor's judgment of the value of contributions to class discussion. There is no makeup for missed in-class assignments.

Late Work: All assignments are due at the beginning of class (not during and not after), on the specified date. I do not accept late assignments unless *prior* arrangements have been made with the instructor. A penalty of 20% per day (including weekends) will be assessed on late assignments.

Academic Integrity: 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 General Polices website (see below) for detailed information pertaining to academic dishonesty, including procedures for determining disciplinary action.

General Policies & Procedures

For information regarding general University policies and procedures, please go to http://go.utdallas.edu/syllabus-policies. These policies include the following:

- Technical Support
- Field Trip Policies, Off-Campus Instruction and Course Activities
- Student Conduct and Discipline
- Academic Integrity
- Copyright Notice
- Email Use
- Withdrawal from Class
- Student Grievance Procedures
- Incomplete Grade Policy
- Disability Services
- Religious Holy Days
- Avoiding Plagiarism

Academic Integrity, Judicial Affairs, Plagiarism

Academic Integrity: The faculty and administration of the Jindal School of Management expect from our 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, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work. We want to establish a reputation for the honorable behavior of our graduates, which extends throughout their careers. Both your individual reputation and the school's reputation matter to your success. The Judicial Affairs website lists examples of academic dishonesty. Dishonesty includes, but is not limited to cheating, plagiarism, collusion, facilitating academic dishonesty, fabrication, failure to contribute to a collaborative project and sabotage. Some of the ways students may engage in academic dishonesty are:

- Coughing and/or using visual or auditory signals in a test;
- Concealing notes on hands, caps, shoes, in pockets or the back of beverage bottle labels;
- Writing in blue books prior to an examination;
- Writing information on blackboards, desks, or keeping notes on the floor;
- Obtaining copies of an exam in advance;
- Passing information from an earlier class to a later class;
- Leaving information in the bathroom;
- Exchanging exams so that neighbors have identical test forms;
- Having a substitute take a test and providing falsified identification for the substitute;
- Fabricating data for lab assignments;
- Changing a graded paper and requesting that it be re-graded;
- Failing to turn in a test or assignment and later suggesting the faculty member lost the item;
- Stealing another student's graded test and affixing one's own name on it;
- Recording two answers, one on the test form, one on the answer sheet;
- Marking an answer sheet to enable another to see the answer;
- Encircling two adjacent answers and claiming to have had the correct answer;
- Stealing an exam for someone in another section or for placement in a test file;
- Using an electronic device to store test information, or to send or receive answers for a test;
- Destroying or removing library materials to gain an academic advantage;
- Consulting assignment solutions posted on websites of previous course offerings;
- Transferring a computer file from one person's account to another;
- Transmitting posted answers for an exam to a student in a testing area via electronic device;
- Downloading text from the Internet or other sources without proper attribution;
- Citing to false references or findings in research or other academic exercises;
- Unauthorized collaborating with another person in preparing academic exercises.
- Submitting a substantial portion of the same academic work more than once without written authorization from the instructor.

http://www.utdallas.edu/judicialaffairs/UTDJudicialAffairs-Basicexamples.html Updated: August, 2011

During the test, students in this section are not allowed to have with them any food or drinks, scratch paper, course materials, textbooks, notes, invisible ink pens, or electronic devices, including IPads, IPhones, IPods, MP3 Players, earphones, radios, smart phones, cameras, calculators, multi-function timepieces, or computers. When possible,

students should sit in alternating seats, face forward at all times, and remove any clothing which might conceal eye movements, reflect images of another's work, or hide course material for copying. Exam proctors will monitor any communication or signaling between students by talking, whispering, or making sounds, or by using your hands, feet, other body movements, the test paper itself or your writing implement.

Students in this course suspected of academic dishonesty are subject to disciplinary proceedings, and if found responsible, the following minimum sanctions will be applied:
> 1. Homework – Zero for the Assignment
> 3. Presentations – Zero for the Assignment, if assigned
> 4. Group Work – Zero for the Assignment for all group members
> 5. Test and Paper – F for the course

These sanctions will be administered only after a student has been found officially responsible for academic dishonesty, either through waiving their right for a disciplinary hearing, or being declared responsible after a hearing administered by Judicial Affairs and the Dean of Student's Office.

In the event that the student receives a failing grade for the course for academic dishonesty, the student is not allowed to withdraw as a way of preventing the grade from being entered on their record. Where a student receives an F in a course and chooses to take the course over to improve their grade, the original grade of F remains on their transcript, but does not count towards calculation of their GPA.

The Jindal School of Management also reserves the right to review a student's disciplinary record, on file with the Dean of Students, as one of the criteria for determining a student's eligibility for a scholarship.

Judicial Affairs Procedures
Under authority delegated by the Dean of Students, a faculty member who has reason to suspect that a student has engaged in academic dishonesty may conduct a conference with the student in compliance with the following procedures:

> (i) the student will be informed that he/she is believed to have committed an act or acts of academic dishonesty in violation of University rules;
> (ii) the student will be presented with any information in the knowledge or possession of the instructor which tends to support the allegation(s) of academic dishonesty;
> (iii) the student will be given an opportunity to present information on his/her behalf;
> (iv) after meeting with the student, the faculty member may choose not to refer the allegation if he/she determines that the allegations are not supported by the evidence; or
> (v) after meeting with the student, the faculty member may refer the allegations to the dean of students along with a referral form and all supporting documentation of the alleged violation. Under separate cover, the faculty member should forward the appropriate grade to be assessed if a student is found to be responsible for academic dishonesty;
> (vi) the faculty member may consult with the dean of students in determining the recommended grade;
> (vii) the faculty member must not impose any independent sanctions upon the student in lieu of a referral to Judicial Affairs;
> (viii) the faculty member may not impose a sanction of suspension or expulsion, but may make this recommendation in the referral documentation

If the faculty member chooses not to meet with the student and instead forwards the appropriate documentation directly to the dean of students, they should attempt to inform the student of the allegation and notify the student that the information has been forwarded to the Office of Dean of Students for investigation.

The student, pending a hearing, remains responsible for all academic exercises and syllabus requirements. The student may remain in class if the student's presence in the class does not interfere with the professor's ability to teach the class or the ability of other class members to learn. (See Section 49.07, page V-49-4 for information regarding the removal of a student from class).

Upon receipt of the referral form, class syllabus, and the supporting material/documentation from the faculty member, the dean shall proceed under the guidelines in the Handbook of Operating Procedures, Chapter 49, Sub-chapter C. If the respondent disputes the facts upon which the allegations are based, a fair and impartial disciplinary committee comprised of UTD faculty and students, shall hold a hearing and determine the responsibility of the student. If they find the student in violation of the code of conduct, the dean will then affirm the minimum sanction as provided in the syllabus, and share this information with the student. The dean will review the student's prior disciplinary record and assess additional sanctions where appropriate to the circumstances. The dean will inform the student and the faculty member of their decision.

Course Schedule, Assignments, and Due Dates

This is a tentative class schedule; changes to the schedule will be posted in eLearning.

	WEEK	CONTENT	READINGS	ASSIGNMENTS
SPRINT 1 - PLANNING	Week 1 8/22 & 8/24	Introduction to the Course Introduction to Systems Analysis and Design	Syllabus Chapter 1	
	Week 2 8/29 & 8/31	Project Management Project Management in Information Technology; Project Management Process Groups	Chapter 2 Chapter 2, 3 (PM)	
	Week 3 9/5 & 9/7	**9/5 – Labor Day – No Class** Object-Oriented Concepts		Group – Milestone 1 Project Selection
	Week 4 9/12 & 9/14	Object-Oriented Concepts Project Integration Mgmt/Scope Mgmt	Chapter 3 Chapter 4, 5 (PM)	Assignment 1
	Week 5 9/19 & 9/21	Exam Review **Exam 1 – 9/21**		
SPRINT 2 - ANALYSIS	Week 6 9/26 & 9/28	Requirements Determination	Chapter 3	
	Week 7 10/3 & 10/5	Functional Modeling	Chapter 4	Group – Milestone 2 Scope/Requirements
	Week 8 10/10 & 10/12	Structural Modeling	Chapter 5	Assignment 2 (Use Case Diagrams)
	Week 9 10/17 & 10/19	Behavioral Modeling	Chapter 6	Assignment 3 (Class Diagrams)
	Week 10 10/24 & 10/26	Exam Review *Exam 2 – 10/26*		Assignment 4 (Sequence Diagrams)
SPRINT 1 – DESIGN & IMPLEMENTATION	Week 11 10/31 & 11/2	Application Design Class and Method Design	Chapter 7 Chapter 8	
	Week 12 11/7 & 11/9	Data Management Layer HCI Layer Physical Architecture	Chapter 9 Chapter 10 Chapter 11	Group Milestone 3
	Week 13 11/14 & 11/16	Construction/Software Testing Installation and Operations	Chapter 12 Chapter 13	Assignment 5 (Design)
	11/21 & 11/23	*Thanksgiving Break 11/21 – 11/25* *NO Class Monday 11/21 or Wednesday 11/23*		
	Week 14 11/28 & 11/30	*Project Presentations*		Group Milestone 4
	Week 15 12/5 & 12/7	Exam Review **EXAM 3 – 12/7**		