ISM 6216 - Business Database Systems II Spring 2017

INSTRUCTOR : Haldun Aytug CONTACT INFORMATION : STZ 351-D

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OFFICE HOURS : Tue: 9:00-11:00 am

Wed: 9:30-11:30 am

PREREQUISITES

ACADEMIC

Students must have completed ISM 6215 (Business Database Systems I) before taking this course.

COMPUTING

Students must have access to a laptop that runs **Windows 7/8/10 Professional/Enterprise**. The laptop should have enough capacity to install and run SQL Server (4GB memory is recommended).

RECOMMENDED TEXT

Unfortunately there is no single textbook that covers the topics of this course in the depth I would like. As a result the lectures were prepared using a variety of sources some of which are listed below.

- <u>Modern Database Management, Eleventh Edition</u>, Jeffrey A. Hoffer, V. Ramesh and Heikki Topi, Prentice Hall.
- Inside Microsoft SQL Server 2008: T-SQL Programming, Itzik Ben-Gan, 2010, Microsoft Press.
- Microsoft SQL Server 2012 T-SQL Fundamentals, Itzik Ben-Gan, 2012, Microsoft Press. ¹

REQUIRED SOFTWARE

The required software for this course can be downloaded from the <u>MSDNAA</u> web site. (https://e5.onthehub.com/WebStore/Welcome.aspx?ws=5e7151bd-739b-e011-969d-0030487d8897&vsro=8).

- Windows 7/8/10 Professional/Enterprise (available at MSDNAA)
- Winzip (or a similar archiving utility)
- MS SQL Server 2012 Developers Edition (available at MSDNAA)

COURSE OBJECTIVES

This course is a continuation of Business Database Systems I, where you learned basic database design and how to query a database. This course will (1) reinforce what you learnt in 6215 by covering advanced SQL and relational algebra, (2) cover database implementation, transaction management and security, and (3) introduce advanced data analytics concepts.

¹ There is a newer version of this book called "T-SQL Fundamentals, Third Edition". It uses SQL Server 2016 which we will not use in this class but most, if not all, of the code should work in SQL Server 2012.

The main goal is to teach you the concepts and tools to implement, use and manage a database in a [potentially] multi-user environment.

ASSURANCE OF LEARNING

Each program at the Warrington College of Business Administration has developed goals and objectives that express the most valued skills and knowledge that students should be able to demonstrate upon completion of the total learning experiences in that program. The following goals are mapped to ISM6216.

<u>Learning Goal 1</u>: Our graduates will be knowledgeable in core Information Technology, Decision Support, and Analytical Skills.

<u>1B</u>. Students will demonstrate competency in: Database Design; Systems Analysis and Design; Telecommunication Strategies and Technologies; Network Security; Analytical Tools, and Project Management.

COURSE EVALUATION

- Assignments/Quizzes -- Assignments are designed to reinforce the lectures. Unless otherwise stated they are individual assignments. I may, from time to time, give short quizzes in class which will count towards your assignment grade.
- **Project** You will complete a term project as a team.
- **Exams** -- There is one midterm and one comprehensive final exam. I reserve the right to give pop-quizzes.
- Grading-- If you think I have graded your work incorrectly you have a right to appeal. Please turn in a written appeal (preferably by email) that specifies the question number and a brief explanation of why my grading is incorrect. I will not accept any appeal without sufficient proof. Use your textbook, sample programs, lecture notes, etc. as a reference when writing your appeal. I give partial credit; however, if an answer is incomplete or is partially correct do not expect more than half the points no matter how close you believe it is to the correct answer.

You are expected to calculate your own grade based on the following weights and scale (A at 93, A- at 89, B+ at 85, B at 81, B- at 77, C+ at 73, C at 70, C- at 67, D+ at 63, D at 60, D- 57, E below 57).

Midterm 25% Final Exam 30%

Project 20% (Groups of three or four)

Assignments/Quizzes 25% (Variable weight per assignment)

ACADEMIC DISHONESTY

For any academic class activity, students must follow the University of Florida Student Honor Code (http://www.dso.ufl.edu/sccr/honorcodes/honorcode.php). Any violation of the honor code will automatically result in a grade of E (Fail) for this course and further sanctions that may include a suspension or expulsion from the University. All incidents will be reported to Student Conduct and Conflict Resolution at the University of Florida.

CLASS POLICIES AND PARTICIPATION

By enrolling in this course you agree to abide by the following policies.

ATTENDANCE

Attendance is not compulsory but you are responsible for all material covered in class. In class, I expect full participation as there are many concepts that can be learned during the course of a discussion. You are expected to complete assigned readings before class as I ask questions and expect you to answer them. I reserve the right to give pop quizzes in addition to the scheduled quizzes to encourage a high level of preparedness.

MAKE-UP WORK

You **cannot make-up for missed exams or quizzes_**unless you have proof that you had a **legal or medical emergency** (regular medical appointments do not constitute an emergency nor scheduled trips) or had to be on a job interview (I require a letter from the potential employer and proof that you actually went to the interview). You are required to let me know of these conflicts in advance when possible.

Assignments should be submitted on time. I do not accept late submissions (no exceptions, including interviews).

EXTRA CREDIT

There will be **no extra credit work available** at any time for any part of the coursework.

LAPTOPS

You can bring your laptops to class since we will have tutorials from time to time. However, you need to keep them turned off all other times.

CELL/SMART PHONES IN THE CLASSROOM

Absolutely no cell/smart phones can be used in the classroom during lectures and exams.

STUDENTS WITH DISABILITIES

Students requesting special classroom accommodations must first register with the Dean of Students Office and obtain the necessary documentation to request appropriate in-class accommodations.

SCHEDULE (TENTATIVE)

Week	Торіс	Readings\ Assignments Due
1.1	Syllabus & Introduction	Installation Instructions
	MS SQL Server Basics	
1.2	Overview of SQL /Relational Algebra	
2.1	Relational Algebra	
2.2	Advanced SQL	Assignment 1
3.1	Advanced SQL	
3.2	Advanced SQL	Assignment 2
4.1	Database Implementation Issues	
4.2	Midterm	
5.1	Stored Procedures	Assignment 3
5.2	Transactions and Transaction Management	
6.1	Transactions and Transaction Management	
6.2	Advanced Topics (Analytics and Data Mining)	Assignment 4
7.1	Advanced Topics (Analytics and Data Mining)	
7.2	Presentations	
8	Exam (comprehensive April 25, 1:55-3:50, STZ 101–) See: http://warrington.ufl.edu/academics/exams.asp	