CSC 4710/6710 - Database Systems
Fall 2017

Time & Place	Monday/Wednesday: 1:00 pm - 2:45 pm Aderhold Learning Center 2
Instructor	Zaobo He Email: zhe4@student.gsu.edu Office: 25 Park Place Building, Room 725 Office Hours: Monday/Wednesday, 12:00 pm - 1:00 pm
TA	Lloyd Cloer Email: asimpleenigma@gmail.com Office: 25 Park Place Building, 640 Office Hours: Tuesday 1:00 pm – 3:00 pm
Textbook	*Fundamentals of Database Systems* (7th edition), Elmasri & Navathe, Addison-Wesley
Pre-requisites	CSc 3410, Data Structures, with grade of C or higher
Objectives	• This course is intended to provide a general introduction to the field of database systems. • The course will cover the fundamental concepts and principles, data models, query languages, database design, concurrency control and some advanced topics. • Students will understand the basic theoretical knowledge of database systems, be familiar with oracle database and SQL, gain experience of designing and developing database systems and database related applications. • Graduate students will also develop abilities of conducting research in database area.
Policies	**Attendance Policy**: Students are required to attend all classes. Attendance will be taken randomly
	Academic Honesty: Plagiarism will result in a score of zero on any test, assignment or paper.
	Assignment Submission Policy: • Assignment must be turned in (hard-copy) at the starting of the class by the due date; otherwise, your submission will be considered late. Late assignments will be accepted, but will be penalized: 10% penalty if submitted by the start of the first class after the due date. No homework will be accepted after that class. • It is the student's responsibility to check any given grade and make complaints within at most one week after the grades are announced. Grades will not be changed afterwards. Make-ups must need the instructor's special permission. In most cases, they are not allowed.
Last Date for Withdrawal	Tuesday, October 10, 2017

Grading Policy: The course will include 3 in-class exams, 3 take-home assignments, and 1 project. The grade allocation is given below:

CSC 4710	Exams 50%	Assignments 30%	Project 20%
CSC 6710	Exams 50%	Assignments 30%	Project 20%

The final letter grade will be determined based on the following criteria (It may be adjusted at the discretion of the instructors):

A	90-100
B	80-89
C	70-79
D	60-69
F	59 and below

Tentative Class Schedule:
This syllabus represents a general plan for the course and deviations from this plan may be necessary during the duration of the course.

Week	Date	TOPIC	Note
1	8/21/2017	• Syllabus • Chapter 1: Database and Database Users	
	8/23/2017	• Chapter 2: Database System Concepts and Architecture	
2	8/28/2017	• Chapter 3: ER Model	
	8/30/2017	• Chapter 4: Enhanced ER Model	
3	9/04/2017	• No class (Labor Day)	
	9/06/2017	• Chapter 5: The Relational Data Model and Constraints	Assignment 1 (see iCollege)
4	9/11/2017	• Chapter 9: Relational Database Design by ER- and EER- Relational Mapping	
	9/13/2017	• Chapter 8: Relational Algebra and Calculus	
5	9/18/2017	• Chapter 8: Relational Algebra and Calculus (cont.)	
	9/20/2017	• Chapter 6: Basic SQL	
5	9/25/2017	• Chapter 7: More SQL	
	9/27/2017	• Chapter 7: More SQL (cont.)	
6	10/02/2017	• Review for Exam 1	Assignment 1 Due
	10/04/2017	• Exam 1 (open book/notes)	
7	10/09/2017	• Chapter 14: Functional Dependencies and Normalization	

	10/11/2017	• Chapter 14: Functional Dependencies and Normalization (cont.)	Assignment 2 (see iCollege)
8	10/16/2017	• Chapter 16: Storage	
	10/18/2017	• Chapter 16: Storage (cont.)	
9	10/23/2017	• Chapter 17: Indexing	
	10/25/2017	• Chapter 17: Indexing (cont.)	
10	10/30/2017	• Review for Exam 2	Assignment 2 Due
	11/01/2017	• Exam 2 (open book/notes)	
11	11/06/2017	• Chapter 20: Transaction Management	
	11/08/2017	• Chapter 21: Concurrency Control	
12	11/13/2017	• Chapter 21: Concurrency Control (cont.)	Assignment 3 (see iCollege)
	11/15/2017	• Chapter 19: Query Optimization	
13	11/20/2017	• Thanksgiving Break	
	11/22/2017	• Thanksgiving Break	
14	11/27/2017	• Chapter 19: Query Optimization (cont.)	
	11/29/2017	• Final exam review	Assignment 3 Due
15	12/04/2017	• No class, final exam and project preparation time	
	12/06/2017	• Final Exam (open book/notes)	Final exam time: 1:00 pm-2:45 pm Project due: email your script and results to zhe4@student.gsu.edu (Email subject: DS_Project_yourLastName)