# **Syllabus**

# INLS 523\_003 Database Systems I (3 credits), Fall 2017

Instructor: Fei Yu (feifei@unc.edu)

Class Schedule: Mondays 6 to 8:45 PM; Manning 117

Office Hours: By appointment; Manning #305 or HSL #540

**Textbook:** Fundamentals of Database Systems, Sixth Edition, Elmasri, R. & Navathe, S.

## **Course Description**

This course will introduce the basic concepts and applications of relational database management systems, including semantic modeling and relational database theory. The classroom teaching will focus on the following five areas.

Database concepts

- Entity-relationship models
- · Relational concepts and mapping
- SOI
- Functional dependencies and Normalization

## **Course Requirement**

Assignment	nent % of total grade	
Attendance	10%	
Class participation	10%	
Homework assignments	40%	
Midterm exam	20%	
Group project & presentation	20%	

## Grading

Undergraduate Students		Gradua	Graduate Students	
Grade	Range	Grade	Range	
Α	90-100	Н	95-100	
В	80-89	P	80-94	
С	70-79	L	70-79	
D	60-69	F	69 or below	
F	59 or below			

### Absence

This is a once-a-week class and a lot of materials are packed into each session. If you miss a session, you will miss a lot. If you have more than 2 absences (or any unexcused absences), your attendance and participation grade will decrease by 25% for every subsequent absence.

### **Due Dates and Late Work**

The homework assignments are normally due on Mondays before 6:00 PM. A late penalty of 10% per day will be applied unless prior arrangements have been made with the instructor. Students are highly encouraged to submit their homework even if it is late.

### Sakai

We will use Sakai for Course Materials and Homework Assignments, and the Group Project Deliverable. It is the responsibility of each student to make sure they have access to Sakai and can submit assignments when they are due. If for some reason you are unable to submit an assignment to SaKai, you may email it to me along with a note about the problem you encountered. Then, as soon as you are able to, it is your responsibility to submit the exact same assignment to Sakai.

### Schedule

Class Date	Topics	Assignment	Due Date
August 28 <sup>th</sup>	Introduction & Database Concept		
September 4 <sup>th</sup>	No class – Labor Day	H1	
September 11 <sup>th</sup>	Modeling and ER		H1
September 18 <sup>th</sup>	ER exercises and Enhanced ER	H2	
September 25 <sup>th</sup>	Relational Concepts	Н3	H2
October 2 <sup>nd</sup>	Relational Mapping		Н3
October 9 <sup>th</sup>	SQL		
October 16 <sup>th</sup>	Midterm Exam		
October 23 <sup>rd</sup>	SQL		
October 30 <sup>th</sup>	SQL		
November 6 <sup>th</sup>	UNC Lynda.com Resource		
November 13 <sup>th</sup>	Relational Algebra		
November 20 <sup>th</sup>	Functional Dependencies	H4	
November 27 <sup>th</sup>	Normal Forms and Normalization	H5	H4
December 4 <sup>th</sup>	Group Project Presentation		H5