INLS 623 – Database Systems II

Instructor: Dr. Carter   Email: carterjl@cs.unc.edu

Lectures:

Room: Manning 001   Time: Thursdays – 5:15 pm - 8:00 pm

Note: Bring your laptops to class everyday. You will use them for exercises.

Official Course Description

Intermediate-level design and implementation of database systems, building on topics studied in INLS 523. Additional topics include MySQL, indexing, XML, and non-text databases.

Objectives

- Exercises in Database Design
- Exercises in Advanced SQL and Embedded SQL
- Concepts in database storage, hashing and indexing
- Exercises in PHP and SQL
- Concepts in database storage, hashing and indexing
- Database Application Development – design and development project
- Non-relational databases (XML, non-textual, web, NoSQL, etc)

Prerequisites

INLS 382 or INLS 582, and INLS 523.

Textbook

Fundamentals of Database Systems, Sixth Edition

Elmasri, R. and Navathe, S.B., Pearson Addison Wesley. (5th edition is also okay – but chapters are moved around)

Software

You will require a laptop to install and run MySQL and MySQL Workbench.

Hardware

Students will need their own laptops. Bring your laptops to class everyday. Contact me if you have any questions.

Attendance

Attendance is mandatory for all weekly lectures. If you have a scheduling conflict, you should take this course another semester. No attendance will be taken but the instructor will not repeat material covered in class.

Course Web Page

http://ils.unc.edu/courses/2016_fall/inls623_001/

Getting Help and Class Discussion

We will be using Piazza for class discussion and getting help. The system is highly catered to getting you help fast and efficiently from classmates and myself. Rather than emailing questions to me, I encourage you to post your questions on Piazza. If you do not get a response within a day or two on Piazza, please send mail to carterjl@cs.unc.edu . But try Piazza first.

Before posing a question, please check if this question has been asked before. This will reduce post clutter and reduce our burden. Repeat questions will be ignored by the instructors.

Piazza allows anyone to respond. So if you see a question that you think you can respond to, please do so, as that will reduce our burden and help you "teach" your fellow students.

This will be a form of class participation that will be noted when I allocate my fudge points!

If you have any problems or feedback for the developers, email team@piazza.com.

Signup Link: https://piazza.com/unc/fall2016/inls623

Class page: https://piazza.com/unc/fall2016/inls623/home

We assume that you have a UNC electronic mail account and are familiar with using email and the World Wide Web. Email will be used extensively in this course. We will use it to communicate to the class essential information concerning assignments. You should check your email at least five times per week. Every time you sit down at a computer to work on an INLS 623 assignment you should first check your email – there may be important information about the current assignment. The web page for this course will contain copies of many of the handouts, assignments, information on the

reading assignments, etc.

We will be using Sakai alongside the course webpage to post PowerPoint lecture slides and other information.

Grading

Assignments	60%
Midterm	15%
Final Examination	25%

The above percentages add up to 100%, but I reserve the right to apply a 10% fudge factor to give consideration to things such as good class participation, stellar assignments, extra credit, answers to exam questions that go far beyond what is expected, and bona fide extenuating circumstances.

There will be several assignments, ranging in duration from 1-3 weeks. The number of points per assignment will generally increase during the course of the semester reflecting the increased length and complexity of the assignments. Several of the assignments will build on previous ones. Each assignment will be due on a specific date; late assignments will not be accepted.

Note that the SILS grading policy is based on the University Grading Policy. SILS uses the following graduate and undergraduate grading scales:

Graduate		Undergraduate
H	Clear excellence Entirely satisfactory Low Passing Failed	A
P	Entirely satisfactory	A-, B+, B, B-
L	Low Passing	C+, C, C-
F	Failed	D+, D, F

Making up Homework and Examinations

Serious illness, a death in the family, and activities such as intramural meets and student exchange programs can justify waiving or relaxing the usual rules for class work and examinations. (But the problems of student life, including the consequences of procrastination and commitments to other courses, cannot.) In circumstances that merit special treatment, documentation is usually available to the student, and I feel most comfortable when a request for special consideration is accompanied by appropriate written material supporting the request. In cases where events that will interfere with

course work are foreseen, a student should discuss the matter with me well before the work is due.

Incompletes

Incompletes will be given only in dire emergencies. Documentation (such as a physician's note) will generally be required. Falling behind in your work is not an emergency.

Courtesy

We will try to be courteous to you; we ask that you be courteous to us. Please do not read the newspaper or other materials during main lecture or section meeting; or work on your laptop on anything but looking at the class notes or taking your own notes of the lecture. If you must be late once or twice, take an aisle seat quietly; likewise if you must leave early. If this becomes habitual, you should drop the course. Most importantly, please remain quiet, except, of course, to ask questions; private discussions between students, even whispers, carry surprisingly well and are a real distraction to those seated near you and to the instructors. Thank you.

Cooperation and Honor Code:

You are encouraged and expected to discuss the material in class and all assignments among yourselves.

You are permitted to discuss all aspects of the SQL and the MYSQL database with anyone.

You are encouraged and permitted to discuss and cooperate on all written assignments, but you are expected to understand all material that you submit. Examinations will consist primarily of material similar to that of the assignments.

You are encouraged to discuss all assignments, but not your solution to the assignments.

How to Succeed in This Course

Participate in Class

Class participation has been a big factor in my upgrading borderline cases.

Review after Class

Review Powerpoint material and readings after each class if they have been distributed.

A good self-test is: Can I explain the material to someone else?