

INLS 723
Database Systems III
Fall 2009

Section: Tuesday evenings, 6:00 – 8:30pm, Manning 304

Instructor: Dr. Robert Capra
Office: Manning 211 (temporary)
Office Hours: 4:00pm – 6:00pm Tues, and by appointment
Email: r<lastname>3 at unc dot edu

Prerequisite(s): INLS 623 (157) – Database Systems II

Textbook (required): *Fundamentals of Database Systems, Fifth Edition*
Elmasri, R. and Navathe, S.B., Pearson Addison Wesley, ©2006.
ISBN: 0321369572

Textbook (optional): *Database Management Systems, Third Edition*
(sometimes known as “the cow book”)
Ramakrishnan, R., and Gehrke, J., McGraw-Hill, ©2002.
ISBN: 0072465638

Course Webpage: http://www.ils.unc.edu/courses/2009_fall/inls723_001/

Grade Weighting:

Item	Weight
Class exercises & participation	10%
Current technology paper and presentation	15%
Homework	20%
Semester design project	20%
Midterm exam	15%
Final exam	20%

1. Course Description

From the SILS course description:

INLS 723 (258): Database Systems III

Prerequisite: INLS 623. Advanced study of database systems. Topics include database design, administration, current issues in development and use, object databases, and distributed databases. (3)

2. Prerequisites

- knowledge of relational theory, including normalization and referential integrity
- knowledge of basic SQL (both DML and DDL)
- knowledge of ER diagramming techniques and how to turn this into a database schema

If you've taken INLS 256 or INLS 157 (Database Systems I), these topics were covered – please come talk to me if you have not taken this course or if you have questions about the knowledge and skills listed above.

3. Course Objectives

- examine advanced concepts and issues in database modeling and design.
- further develop SQL knowledge and experience.
- gain practical experience with Oracle and SQL through the design and implementation of an Oracle database project.
- gain experience with Oracle development products, such as Oracle Forms and Reports and SQL*Plus.
- explore social, ethical, administrative, and policy issues surrounding databases.

4. Hardware and Software Requirements

You are welcome to use the SILS lab computers for this class, but if you have a laptop, feel free to bring it to class. The laptop has to be networked to access the Oracle server.

We will be using the following software applications for this class:

- SSH client
 - You can use PuTTY (freeware)
 - or you can download SSH secure shell
- a secure FTP client (note that SSH secure shell has an integrated secure FTP client)
- Oracle client
- (Optionally) Oracle Forms and Reports, Oracle JDeveloper

The Oracle software may be available through the SILS lab; please see me if you have questions about obtaining these.

5. Graded Work

Your grade will be based on a class exercises and participation, a midterm test, a final exam, homework assignments, a technology paper and presentation, and a semester long database design project, weighted as shown on the table listed under “Grade Weighting” on the first page.

Database Implementation Project

One of the ways you will gain practical design experience this semester will be “hands-on” through work on a database design and implementation project. Details about these projects will be described throughout the semester and posted on the course web site.

Homework

Throughout the semester, homework will be assigned to give you practice applying concepts discussed in class and in the texts. The exact number of homework assignments may vary from one semester to the next, but you may expect somewhere between 6 to 10 homeworks throughout the semester. Completed homework assignments will be submitted electronically using the Blackboard system.

Current technology paper and presentation

Every student will sign up for a “current technology” paper and presentation during the semester. These will be completed in the form of a written document and an in-class presentation on a current issue or topic important to database implementation, administration, or design. Part of the goal of this assignment is for you to gain confidence in reading, understanding, and presenting current topics about database research and technology. Details on each of these assignments will be posted on the course web site.

Exams

There will be one mid-term and one final exam.

6. Grading Policies

The following grade scale will be used AS A GUIDELINE (subject to any curve):

Graduate	Percentage	Undergraduate	Percentage
H	100-95%	A	100-90%
P+	94-90%	B	89-80%
P	85-89%	C	79-70%
P-	80-84%	D	69-60%
L	70-79%	F	Below 60%
F	69% and below		

This scale will be used as a GUIDELINE ONLY. The final grade scale may differ.

Due Dates and Late Work

Each assignment will have a due date and time and will include instructions for submission. Late submissions will not be given any credit if submitted after graded assignments or solutions have been released. Typically, a late penalty of 10% per day will be applied unless prior arrangements have been made with the instructor.

Requests for Extensions and Absences

Any request for an extension must be made, preferably by email, at least 24 hours prior to the due date. Written documentation is required for illness. If a serious illness prevents you from taking any of the tests, send your instructor an e-mail message, or a friend with a note, describing your condition before the scheduled test. Also, to establish a valid excuse for an illness you must get a note from a physician or the

University infirmary. Before missing a test for any reason, you must make every effort to discuss the problem with your instructor before the day of the test.

Statute of Limitations

Any questions or complaints regarding the grading of an assignment or test must be raised within one week after the score or graded assignment is made available (not when you pick it up).

7. Course Communication (Website, Listserv, Blackboard)

Course Website

The official course website is at:

http://www.ils.unc.edu/courses/2009_fall/inls723_001/

It is the responsibility of every student to **check the website regularly** for announcements.

The Announcements section of the website will be the source for all **official announcements** related to the class. Your instructor may announce tests, assignments, or changes to assignments in class, but there is no guarantee or promise that such announcements will be made in class. The Announcements section of the website is the **only** official, reliable source for announcements, changes, etc. from the instructor. If something the instructor says in class conflicts with information posted by the instructor on the website, then the information posted on by the instructor **on the website takes precedence**. Verbal instructions are easily mis-interpreted, and they do not leave a documentation trail.

Listserv

In addition to the course website, there will be a UNC listserv for this course. This listserv should be available by the end of the second week of classes. Details will be posted on the course web page.

Blackboard System

Course grades will be posted to the Blackboard system available at:

<http://blackboard.unc.edu/>

The Blackboard system will be used primarily for posting grades and submitting assignments – it is unlikely that other course material or information will be posted there.

8. Honor Code

The UNC Honor Code is in effect for all work in this course. When work or ideas are not your own, you must attribute them. Unless otherwise stated, all assignments in this class are individual assignments, meaning that the substance of the work you turn in must be your own. If you have any doubts or questions about a course of action or a specific situation, please ask for clarification.

Students should NOT receive (or give) major creative assistance or ongoing minor support on individual assignments. If you have any questions about this, please ask me.

9. Special Accommodations

If any student needs special accommodations, please contact the instructor during the first week of classes.