

CS 623 – CR 23287 – Spring 2002
Database management systems
General Course Information

(<http://www.csis.pace.edu/~cscharff/cs623> and <http://blackboard.pace.edu>)

“Learning without thinking is labour lost; thinking without learning is perilous”. Confucius, *Analects*, II, 17.

Instructor: Dr. Christelle Scharff
Office: 156 William Street
Floor 12 - 1204 B
New York, NY
Email: cscharff@pace.edu
Class time: Tu 6:00-8:40pm
Classroom: W502
Office Hours: Monday 3:30-5:30 pm - Tuesday 4:45-5:45 pm
Wednesday 2:30 - 4:30 pm and by appointment

Textbook: *Databases and transaction processing - An application-oriented approach*, Philip M. Lewis, Arthur Bernstein and Michael Kifer, Addison Wesley, ISBN 0-201-70872-8. Additional materials will be handed out in class or available from the web.

General Information: CS623 is a 3 credit course.

Course description: CS623 looks at the design of database management systems to obtain consistency, integrity and availability of data and at conceptual models and schemas of data: relational, hierarchical and network. It also discusses transaction processing systems. Topics covered include models of transactions, architectures of transaction processing systems and concurrent transactions.

Students undertake a semester project that includes the design and implementation of a database system and of transactions.

Goals: By the end of this course, students will be able to design and implement a database system and will have some practice using JDBC to implement a set of transactions. They will also develop independent learning skills and will be aware of the research going on in databases.

Tools: Oracle, SQL, JDBC, XML.

Prerequisites: CS 601 - CS 603. Students must be familiar with JAVA.

The Following CS 623 Policies are Strictly Enforced

Assignments: Assignments and further explanations for assignments are posted on <http://www.csis.pace.edu/~cscharff/cs623>. The ‘Guidelines for All assignments’ (distributed in class) gives some details on how to hand in homework assignments in CS 623.

Examinations: There will be homework assignments, a project in several parts, a group research paper, two group presentations (research presentation and project presentation) and a final examination. The group for the group research paper will consist of 2 persons and the group for the group project will consist of 3 persons. In case of problems during the semester in attending a test or handing an assignment you have to inform me before the due date.

Important Dates:

Research	February 19	Subjects of research papers due
Research Project	March 19	Research papers due (2 pages) & presentations
Final Exam	April 23	Presentations of the projects
	TBA	Cumulative final exam

Final exam covers material from the lectures, homeworks, project and readings.

Course Grades: Your overall course average for CS 623 will be computed using the following category weights:

Homeworks and project and project presentation	40%
Research paper and paper presentation	30%
Final exam	30%

Grades are computed the following way:

A	90-100
A-	88-90
B+	85-88
B	82-85
B-	80-82
C+	75-80
C	70-75
C-	65-70
D+	60-65
D	55-60
F	0-55

Attendance is required. Over 3 unexcused absences will result in a reduction in grade for the semester.

Academic Integrity: You are encouraged to discuss the intellectual aspects of assignments with one another. However, each individual is responsible for formulating a solution on his/her own. You must know the difference between cheating and discussing the intellectual aspects of an assignment. All students submitting the same or suspiciously similar assignments will receive a grade of zero and be penalized. Honesty is highly valued and dishonesty is punished. Those found to be cheating on exams or assignments are formally brought up on charges of academic dishonesty! (Please refer to the University rules and regulations regarding academic dishonesty).

Course Handouts and Lecture Slides: Course handouts will be available on the CS 623 web page (<http://www.csis.pace.edu/~cscharff/cs623>). Copies of lecture slides will be available on the WWW. It is your responsibility to print the lecture notes before each class.

Comments: All of the above regulations are binding on any student taking CS 623 during the Spring 2002 semester and they will be strictly enforced.