CISC 3500 Database Systems Fall 2018

Description: This course covers database design and the use of databases in applications, with an introduction to the internals of relational database engines. It includes extensive coverage of the data model, relational algebra, query optimization, query processing, and SQL programming. There will be programming projects/labs, which explore database design and management by utilizing appropriate features of SQL.

Instructor: Dr. Ying Mao (JMH 328A)

Email: yingmao at cis.fordham.edu

Office Hours: Tuesday / Friday 10:00 a.m. – 11:00 a.m. (other times by appointment).

<u>Textbook:</u> Database Management Systems (third edition); Raghu Ramakrishnan and Johannes Gehrke.

<u>Course Web Resources:</u> https://yingmao.github.io/cisc3500/

Grading Policy:

Attendance ---- 5%
Quiz ---- 10%
Homework / Labs ---- 15%
Projects ---- 15%
Midterm ---- 25%
Final ---- 30%

- A (>= 90)
- B (>= 80)
- C (>= 70)
- D (>= 60)
- F(<60)

Policy: Attendance is strongly encouraged and required.

<u>Late submission of projects:</u> One day: 90%, two days: 70%, Three days: 40%, Four days: 20%, Five days: 0% of earned points.

<u>Late submission of labs/homework:</u> 0% of earned points.

Tentative Course Schedule

Week	1	Introduction and Overview of Database Systems
Week	2	Relational Algebra
Week	3-5	SQL Programming
Week	6	E/R Model
Week	7	Database Design
Week	8	Midterm Review / Midterm
Week	9-10	Transactions
Week	11	I/O Model and Index Structure
Week	12	Query Optimization
Week	13	Thanksgiving!
Week	14	Database Applications
Week	15	Final

Additional Remarks

• Academic Honesty

All work produced in this course should be your own unless it is specifically stated that you may work with others. You may discuss the homework problems with other students generally, but may not provide complete solutions to one another; copying of homework solutions is always unacceptable and will be considered a violation of Fordham's academic integrity policy. Violations of this policy will be handled in accordance with university policy which can include automatic failure of the assignment and/or failure of the course. For more information, please refer to the Academic Integrity website.

• Makeup Exam

There will be no make-up exams given after the exam date. If you know in advance that you will have to miss an exam, you must check with me (in advance) to avoid getting a zero for that exam. In case of illness on an exam date, please contact me as soon as possible, so that appropriate arrangement can be made.