

# CS 480: Database Systems

Sean Deitz

Spring 2019

E-mail: [sdeitz2@uic.edu](mailto:sdeitz2@uic.edu)

Web: <https://piazza.com/uic/fall2019/cs4802>

Lecture Hours: 5 pm - 6:15 pm Tues + Thurs  
Lecture Center F1

Office Hours: 12:00 pm - 4:00 pm Tues + Thurs  
Office: 1237 SEO

TA: Abdullah Alourani

TA Office Hours: TBD by piazza poll

---

## Course Description

The goal of CS 480 is to acquaint yourself with the design and programming of relational databases. Topics include common design principles, Logical and Relational database design, normalization, transactions, SQL programming, and non-relational approaches to storing data. This course involves both the theory and practice of database programming, which will be reflected in the assignments.

## Prerequisites

- CS 251: Data Structures

## Required Readings

- Database System Concepts, Sixth Edition, H. Korth, A. Silberschatz, S. Sudarshan, McGraw Hill. ISBN-13: 978-0073523323 ISBN-10: 0073523321

alternatively, these texts can also serve as primary references

- A First Course in Database Systems, J. D. Ullman and J. Widom. ISBN-13: 978-0136006374 ISBN-10: 013600637X
- Database Management Systems, R. Ramakrishnan and J. Gehrke. ISBN-13: 978-0072465631 ISBN-10: 0072465638
- Database Systems: An Application Oriented Approach, Kifer, Bernstein, Lewis. ISBN-13: 978-0321268457 ISBN-10: 0321268458

- Database Systems: Design, Implementation and Management, Coronel, Morris. ISBN-13: 9781337627900 ISBN-10: 1337627909

## Course Policy

### Attendance Policy

Class attendance will be measured via clicker quizzes administered during class. Participation in at least 50% of the questions will be required to receive credit for the day. The lowest 5 grades for the semester will be dropped, that is you may miss up to 5 classes no questions asked. You may opt-out of the attendance policy any time before the first midterm, in which case that percentage of the overall grade will be added as weight to the final examination.

### Grading Policy

The graded assignments will consist of the following.

Out of class reading will be tested by a combination of Blackboard quizzes and clicker quizzes. Quizzes on Blackboard may be assigned regularly designed to test whether you are keeping up with the reading. These questions will be cursory and not indicative of the full knowledge you should be acquiring. Clicker quizzes will be delivered during the majority of lectures, with participation in at least 50% of the questions being required to receive credit for the day. Approximately every week a homework will be assigned. This will give you the opportunity to explore the material at greater length and will require writing code in one or more languages according to assignment specifications. There will be two midterm examinations given in the evenings (tentatively) of September 24th and October 29th. These exams will be from 5-7 pm, though they may be rescheduled according to necessity. In particular if there is conflict with a religious holiday I will be holding alternative examination times earlier in the day or in the evening of the day prior for the October 29th exam. There will be a comprehensive final exam during finals week (December 9th-13th). Check [https://registrar.uic.edu/current\\_students/calendars/](https://registrar.uic.edu/current_students/calendars/) to view the schedule when it becomes available.

- 10% of your grade will be determined by participation in clicker and Blackboard quizzes.
- 40% of your grade will be determined by the homework assignments.
- 30% of your grade will be determined by the two midterms.
- 20% of your grade will be determined by the final exam.

The lowest homework assignment will be dropped when determining final grades. Your final letter grade will be determined using the traditional 90-80-70-60 scale; however, the scale may shift downward, e.g. 88-78-68-58. There will be separate scales for the graduate and undergraduate students, as well as augmented requirements for one or two of the homework assignments.

Grading mistakes do happen, and so it is in your best interest to review all returned materials and published scores for correctness. Once a score is posted, there is a one week re-grading period where mistakes can be corrected by contacting the TA or professor during office hours. After the one week period, the posted score becomes official.

## Late Policy

You may submit up to two homework assignments late by a single day. The instructor will post on Piazza when assignments become available and if any deadlines become extended.

## Academic Dishonesty Policy

As an academic community, the University of Illinois at Chicago is committed to providing an environment in which research, learning, and scholarship can flourish and in which all endeavors are guided by academic and professional integrity. All members of the campus community – students, staff, faculty, administrators – share the responsibility of insuring that these standards are upheld so that such an environment exists. Instances of academic misconduct by students, and as defined herein, shall be handled pursuant to the Student Disciplinary Policy. Academic dishonesty includes, but is not limited to:

- Cheating

Either intentionally using or attempting to use unauthorized materials, information, people, or study aids in any academic exercise, or extending to or receiving any kind of unauthorized assistance on any examination or assignment to, or, from another person.

- Examination by Proxy

Taking or attempting to take an exam or quiz for someone else other than the student is a violation by both the student enrolled in the course and the proxy or substitute.

- Non-Original Works

Submission or attempt to submit any written work authored, in whole or part, by someone other than the student.

Absolutely no transfer of program code between students is permitted (paper or electronic), and you may not solicit code from family, friends, or online forums. Other examples of academic dishonesty include emailing your program to another student, copying-pasting code from the internet, working in a group on a homework assignment, and allowing a tutor, TA, or another individual to write an answer for you. It is also considered academic dishonesty if you click someone else's iClicker with the intent of answering for that student, whether for a quiz, exam, or class participation. Academic dishonesty is unacceptable, and penalties range from a letter grade drop to expulsion from the university; cases are handled via the official student conduct process described at

<https://dos.uic.edu/conductforstudents.shtml>

## Electronic Communication Policy

All electronic communication with course staff should take place on Piazza unless emails are specifically requested by the staff. There will be quizzes delivered through Blackboard and it is your responsibility to complete these quizzes before class. Grades may be checked on Blackboard, and communication with the instructor should take place in a private post on Piazza. Lectures will be recorded and made available through the Echo360 Lecture Capture system in Blackboard.

## **Religious Holidays**

The UIC Senate Policy on religious holidays is the following.

The faculty of the University of Illinois at Chicago shall make every effort to avoid scheduling examinations or requiring that student projects be turned in or completed on religious holidays. Students who wish to observe their religious holidays shall notify the faculty member by the tenth day of the semester of the date when they will be absent unless the religious holiday is observed on or before the tenth day of the semester. In such cases, the students shall notify the faculty member at least five days in advance of the date when he/she will be absent. The faculty member shall make every reasonable effort to honor the request, not penalize the student for missing the class, and if an examination or project is due during the absence, give the student an exam or assignment equivalent to the one completed by those students in attendance. If the student feels aggrieved, he/she may request remedy through the campus grievance procedure.