1 What is the Course About

The amount of information that must be processed in many applications is exploding. A modern database management system (DBMS) provides the scalability that is required by these applications. As a result, DBMS’s are now ubiquitous in modern industrial practice. This course examines the practice of database management through two major units. The first discusses the users view (externals) of a DBMS. It covers concepts that are fundamental to the proper use of a DBMS including database languages and database design. The second discusses what goes on inside (internals) a DBMS. It covers algorithmic detail for some of the key components of a DBMS.

2 Course Staff

2.1 Who We Are

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>CS Login</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor</td>
<td>Stan Zdonik</td>
<td>sbz</td>
</tr>
<tr>
<td>HTA</td>
<td>Harsha Yeddanapudy</td>
<td>hyeddana</td>
</tr>
<tr>
<td>HTA</td>
<td>Andrew Osgood</td>
<td>aosgood</td>
</tr>
<tr>
<td>Grad TA</td>
<td>Cansu Aslantas</td>
<td>cpa</td>
</tr>
<tr>
<td>UTA</td>
<td>Alison Tsai</td>
<td>altsai</td>
</tr>
<tr>
<td>UTA</td>
<td>Craig Hawkins</td>
<td>hawkins</td>
</tr>
<tr>
<td>UTA</td>
<td>Nisarg Rawal</td>
<td>nrawal</td>
</tr>
<tr>
<td>UTA</td>
<td>Rick Miyagi</td>
<td>rmiyagi</td>
</tr>
<tr>
<td>UTA</td>
<td>William Truong</td>
<td>wtruong</td>
</tr>
<tr>
<td>UTA</td>
<td>(Joe) Xunzhe Xu</td>
<td>xxu8</td>
</tr>
<tr>
<td>UTA</td>
<td>Yulong Tian</td>
<td>yt14</td>
</tr>
</tbody>
</table>

2.2 Office Hours / TA Hours

Professor Zdonik will hold hours by appointment. The TAs will hold hours during the week. See the website for a complete and up-to-date schedule of office hours. If hours need to be re-scheduled, students will be informed via the course mailing list (cs127@lists.cs.brown.edu).

3 Prerequisites

None, although we recommend having taken CS 32 and CS 31 (or CS 33). You also must be familiar with the Java programming language. If you have only taken CS 15 or CS 17,
you should e-mail cs127tas@cs.brown.edu to discuss the course expectations.

4 Email

The two official course email address are cs127tas@cs.brown.edu (which goes to all TAs) and cs127headtas@cs.brown.edu (which goes to the HTAs and Professor Zdonik).

In general, cs127tas should be used for all course-related questions. The exceptions are when you have a reason to speak only with a specific TA (i.e., about a specific grading question) or with the professor and/or HTAs.

Students who sign up for the course will be subscribed to a mailing list (cs127@lists.cs.brown.edu). The TAs will use that list for any course announcements: reminders about due dates, any hours switching, review sessions, etc. Please make sure to read your email!

5 Textbook

You are required to have access to Database System Concepts, Sixth Edition by Silberschatz, Korth, and Sudarshan. ISBN: 0073523321. A copy of the textbook has been placed on reserve in the library. We encourage students to share textbooks with their friends.

6 Lectures

Lectures will be held on Monday and Wednesday, 3-4:20 PM in CIT 368 unless otherwise specified. See the website for an up-to-date schedule of the lectures. Please note that this schedule is subject to change.

Lecture slides will be available online on the course website.

Each of the lectures has an associated reading in the textbook (a list of the associated readings can be found on the website). We recommend looking at the chapter(s) before coming to lecture as well as after lecture to reinforce the concepts.

7 Assignments and Grading

There will be seven homeworks and four programming assignments. Most coding will be done in Java. In addition, there will be three in-class quizzes. The quizzes are closed-book.

Each homework will have two parts:

1. A set of practice problems that will be graded as one of (✓+, ✓, ✓−)
2. A problem or two that will be graded in detail and will be given a score.

The practice problems will not be graded individually, but rather a solution sheet will be handed out.

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programming</td>
<td>40%</td>
</tr>
<tr>
<td>Homeworks</td>
<td>15%</td>
</tr>
<tr>
<td>Quiz 1</td>
<td>15%</td>
</tr>
<tr>
<td>Quiz 2</td>
<td>15%</td>
</tr>
<tr>
<td>Quiz 3</td>
<td>15%</td>
</tr>
</tbody>
</table>

This year we will be experimenting with anonymous grading meaning that all grading will be done by the course staff without knowing the name of the student who turned in the assignment. This means that when turning in homework, please only write your Banner ID on your turn in and not your name. Also please note that all of the grading in this course will be done by undergraduate students.

8 Incomplete Policy

Incompletes are granted only under exceptional circumstances (e.g., severe illness, death in the family, etc). Getting a dean to certify your reason for requesting an incomplete helps, but is not sufficient by itself.

Too heavy of a course load is not sufficient reason for an incomplete!

9 Late Policy

Everyone is allowed a total of three “free late days” on programming assignments for the semester. Beyond that, you are penalized 25% of the assignment’s value for each day it is late. Late penalties are capped at 100% of an assignment’s value. Free Late days may not be used on regular homework assignments and you are penalized 20% of the assignment’s value for each day it is late.

10 Recitations

We are going to hold weekly recitation sessions which are intended to be more open and collaborative than regular TA hours: students are encouraged to form groups and work on the problems together. Individual students who have a specific question or regrade request are more than welcome to get a TAs attention, as well.

Recitation sessions are not exempt from the collaboration policy. You may not write up
your actual homework in these sessions. Your time at the sessions is meant to provide you
with an understanding of the problem.

11 Piazza

This year, we will be using Piazza to manage course announcements and allow students
to get questions answered quickly. Here, you can see any updates that we post as well as
ask clarification questions. We have chosen to use Piazza this year to provide you with a
platform to address questions you have by either asking other students and the course staff
or searching for existing answers.

Please use Piazza only for quick clarification questions and save in-depth questions for
TA hours. Additionally, do not post any code to Piazza. Doing so is a violation of the
collaboration policy. A good rule of thumb is that if a question is specific to your imple-
mentation of the project, it should be asked on hours rather than on Piazza. If you are
unfamiliar with how to use piazza, you can find a tutorial here.