

CSC 352: Database Management and Design

Fall 2007

OVERVIEW OF COURSE CONTENT:

Welcome to CSC 352, Database Management and Design! One of the main goals of this class is to help you understand why database management systems have become instrumental in the effective storage, retrieval, and protection of information. You will learn about the structure of database management systems, query facilities, file organization, security, and the development of database systems.

INSTRUCTOR INFORMATION:

Instructor:	Shana Watters
Email:	watterss@augsborg.edu
Phone:	612-330-1142
Office:	Sverdrup 203F
Office Hours:	Wednesdays: 10:45 am – 11:45 am Additional Office Hours: TBA By appointment (email or call to set up appointment)

Please feel free to stop by my office at other times during the day and not just during my regular office hours. In addition, you may also phone or send email at any time with questions.

CLASS INFORMATION:

Class Day:	Thursday
Class Time:	6:00 pm – 9:00 pm
Classroom:	Sverdrup 206
Important Dates:	Tuesday, September 18: Last Day to Drop Class without Notation: Friday, November 2: Mid-term grades due Registrar Friday, November 9: Last Day to Change Grade Option or Withdraw from Class Thursday, December 20: Final Exam (6:30 pm – 8:30 pm) Friday, December 28: Final grade due Registrar

REQUIRED MATERIAL:

- 1) Raghuram Krishnan and Johannes Gehrke, *Database Management Systems*, Third Edition, Mc-Graw-Hill Companies, Inc., 2003. ISBN 0-07-246563-8
Book website: <http://www.cs.wisc.edu/~dbbook/>

- 2) Access to Moodle

We will be using Moodle for this course. To access Moodle you will need access to AugNet. Contact the IT department at Augsburg if you do not have a login and password for AugNet (this is the same login and password used for "augsborg.edu" web-mail). If you have another e-mail account you will still need to get an Augsburg login from IT. You can request a login and password by contacting the IT department by one of the following ways;

- a) <http://www.augsburg.edu/stucomp/>
- b) email: stucomp@augsborg.edu
- c) phone: 612-330-1400
- d) visit: Student Computing Desk on the second floor (link level) of the library.

3) Access to MySQL

We will be using the MySQL database software. A username and password will be given to you along with instructions on how to access and use the system.

ATTENDANCE POLICY:

Attendance is important for this class. The class meets only once a week and there will be a large amount of information disseminated. To encourage attendance, you will be given 10 in-class quizzes or activities over the course of the semester each worth .5% of your overall grade. If you will be absent from class, please notify the instructor as soon as possible. You may contact the instructor via the telephone or email.

GRADES:

10 In-class quizzes and activities; .5% each	5%
8 Homework Assignments; 7.25% each	58%
1 Writing Exercise	4%
3 Exams; 11% each	33%
Total	100%

Using the above percentages, 90% and up will earn you some level of A, 80% and up some level of B, 70% and up some level of C, 60% and up some level of D. These cutoffs are the baseline grading system. In most cases, changes are not required but in certain cases the cutoffs may be lowered. As the course progresses, the instructor will discuss with the class any changes to this grading system.

HOMEWORK:

Throughout the semester, you will be assigned homework which will help you assess your understanding of the material. There will be a total of 8 homework assignments. Each assignment will be worth 7.25% of your overall grade.

Homework assignments will be posted on Moodle. Your homework will be collected at the start of each class and should be typed. Make an additional copy of your homework and bring it with you to the class. We will be going over the homework at the start of the class so that students can ask questions and receive feedback on their work in a timely fashion since much of the work that is done builds on previous knowledge.

Collaboration Policy for Homework: You are encouraged to **talk** to your fellow students about the homework problems. Many of the problems are difficult and collaboration may help you understand the problem. However, when you are writing your solutions to the homework problems, you are required to do the following two things:

- 1) you must state on your homework the students' names that you discussed the problem with
- 2) you must write up your homework solutions by yourself; you are not allowed to copy the answer of another student

Late Homework Policy: Homework will not be accepted late unless prior arrangements have been made with the instructor. Homework will be turned in at the start of class. We will be going over the homework during class on the date the homework is due.

If you know you will be absent on a due date, inform the instructor and turn in the assignment by the due date and time. You may send the instructor your homework via email or drop it off at the instructor's office.

EXAMS:

There will be 3 open book/open notes exams. Each exam will be held at the start of the class and will be 75 minutes long. Each exam will be worth 11% of your overall grade. The exams will be based on the material covered by the assigned readings, lectures, discussions, homeworks, self-quizzes, and in-class quizzes and activities.

To help ensure that students are prepared for the exam, a review will be held during the class that is in the week prior to the exam itself.

WRITING EXERCISE

There will be one writing exercise. You will read and analyze a paper on the relational model and answer questions concerning the paper. This exercise is to help you develop both analytical and writing skills. The writing exercise will be worth 5% of your overall grade.

Collaboration Policy for Writing Exercise: The writing exercise should be completed by you alone without any assistance from your fellow classmates. I want to read your own insights and ideas.

ACADEMIC HONESTY

All work submitted must represent your own individual effort.. You are encouraged to discuss course material and approaches to homework problems with classmates and the instructor, but you should never misrepresent someone else's work as your own. It is also your responsibility to protect your work from unauthorized access. Collaboration on exams, copying homework solutions from your classmates, or copying homework solutions from the web is cheating and grounds for failing the course. Any student caught cheating will receive as a minimum a "zero" on the exam or homework and may be given an F as a class grade.

For further information on Augsburg's Academic Honesty Policy, please see the Student Guide at <http://www.augsburg.edu/studentguide/> .

SPECIAL NEEDS AND ACCOMMODATIONS:

If you have a disability that requires special needs, please contact me by the second class and provide documentation of what you require from either the Augsburg College Access Center (ACCESS) or the Center for Learning and Adaptive Student Services (CLASS). We will work together to accommodate your needs.

ACCESS

Mortensen Hall, Room 13
Monday – Friday, 8:00 a.m. – 4:30 p.m.
612-330-1350

CLASS

2211 Riverside Avenue CB #57

SCHEDULE:

Week	Date	Topics	Pages	Assigned On This Date	Due On This Date
1	9/6	Syllabus Overview Ch 1: Overview of Database Systems Ch 2: Introduction to Database Design	3-51	HW1 Writing Exercise	
2	9/13	Ch 3: The Relational Model	57-94	HW2	HW1
3	9/20	Ch 4, Relational Algebra and Calculus Ch 5: SQL: Queries, Constraints, Triggers	100-141	HW3	HW2
4	9/27	Ch 5: SQL: Queries, Constraints, Triggers	141-174		
5	10/4	Ch 6: Database Application Development Ch 8: Overview of Storage and Indexing Review for Exam 1	185-216 273-282	HW4	HW3
6	10/11	Exam 1 covering Ch 1-5 Ch 8: Overview of Storage and Indexing	282-300		
7	10/18	Ch 12: Overview of Query Evaluation	393-418	HW5	HW4
8	10/25	Ch 16: Overview of Transaction Management	519-545		
9	11/1	Ch 19: Schema Refinement and Normal Forms Review for Exam 2	605-619	HW6	HW5
10	11/8	Exam 2 covering Ch 6, 8, 12, and 16 Ch19: Schema Refinement and Normal Forms	619-642		
11	11/15	Thanksgiving Holiday Recess No Class			
12	11/22	Ch 20: Physical Database Design and Tuning Ch 21: Security and Authorization	649-720	HW7	HW6 Writing Exercise
13	11/29	Ch 25: Data Warehousing and Decision Support	846-883	HW8	HW7
14	12/6	Ch 26: Data Mining	889-920		
15	12/13	Special Topics Review for Exam 3			HW8
16	12/20	Exam 3 covering Ch 19, 20, 21, 25, and 26 (Finals Week)			