

Syllabus

Instructor

Dr. Konstantinos Kalpakis
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Class homepage: <http://www.csee.umbc.edu/~kalpakis/Courses/461/>
Office Hours: Monday and Wednesday, 2:30pm-3:30pm, and by appointment.

Meeting Time and Place

Monday and Wednesday 11:00am-12:15pm
Room ITE 229

Teaching Assistant: Jinsong Li, Room ITE 349,
Phone: 410-455-8933, Email: jinsong1@umbc.edu.
Office hours: Monday and Wednesday, 10:00am-11:00am, and by appointment.

Important Dates

- Midterm Exam, October 22, 2003, 11:00pm-12:15pm.
- Final Exam, December 12, 2003, 10:30am-12:30pm.
- Projects due, December 8, 2003, 11:59pm.

Prerequisites CMSC-341, or permission of the instructor.

Text. The required text is “Database System Concepts. 4th Edition” by Silberschatz, Korth, and Sudarshan published by McGraw-Hill, 2002.

List of Topics.

- Entity-Relationship Model
- Relational Model
- SQL

- Normalization
- Design Methodology
- Storage and File Structures
- Indexing and Hashing
- Query Processing
- Transactions
- Concurrency Control
- Recovery
- System Architectures
- Security
- Special topics (TBA, tentative)

Course objectives:

Each student will (a) learn the fundamental concepts of database management, including database design, models and languages, and system-implementation techniques, and (b) develop skills to apply those concepts in practical data management applications.

Required Work

Required work consists of (1) taking the midterm exam and final exam, (2) homework assignments, and (3) a project. Further, you are expected to actively participate in class discussions. Academic dishonesty will be dealt severely according to University Policy.

Homework

There will be at least four homework assignments. Homework assignments are to be done and written individually by each student. **Each homework assignment will be due at the beginning of class, within the first 15 minutes of class, on the date specified. No late homeworks will be accepted, unless University Policy states otherwise.**

Exams

There will be a midterm exam and a comprehensive final exam. All the exams will take place in class and will be closed-book and closed-notes. Make-up exams are possible only under University Policy. You should make prior arrangements with the instructor if you expect to miss an exam.

Project

There will be one project assignment. It must be done and written individually by each

Activity	Weight
Homework	10%
Project	20%
Midterm Exam 1	30%
Final Exam	40%
Total	100%

Table 1: Course Activities and their relative weights.

student. No late projects will be accepted, unless University Policy states otherwise. Details of the project will be provided shortly after the first midterm exam.

Grading Policy

The course grades will be determined as follows. For each course activity in Table 1, each student will receive an activity score, which will be the average of the student's scores on the assignments for that activity. An activity score is a number in the range 0...100. A term score will be computed by taking the weighted sum of the activity scores, using the relative weights given in Table 1. The instructor will convert term scores into letter grades by using the following mapping: $[90, 100] \Rightarrow A$, $[80, 90) \Rightarrow B$, $[70, 80) \Rightarrow C$, $[60, 70) \Rightarrow D$, $[60, 100] \Rightarrow P$, $[0, 60) \Rightarrow F$.

Incomplete grades will issued only under those extreme situations described by University Policy for granting incompletes. Failure to complete assignments on time is not a sufficient reason for an incomplete.

Necessary, but not sufficient, conditions to pass the course are as follows: you must have a homework activity score of at least 50 points, at least 50 points for the project, and at least 30 points for each exam, including the final exam.

Academic Integrity Policy

By enrolling in this course, each student assumes the responsibilities of an active participant in UMBC's scholarly community in which everyone's academic work and behavior are held to the highest standards of honesty. Cheating, fabrication, plagiarism, and helping others to commit these acts are all forms of academic dishonesty, and they are wrong. Academic misconduct could result in disciplinary action that may include, **but is not limited to**, suspension or dismissal. To read the full Student Academic Conduct Policy, consult the UMBC Student Handbook, the Faculty Handbook, or the UMBC Policies section of the UMBC Directory.

There is no tolerance for academic dishonesty in this course. Any and all academic dishonesty acts will be treated severely, as prescribed in the UMBC's Student Academic Conduct Policy.