

# CMSI 486

## INTRODUCTION TO DATABASE SYSTEMS Fall 2005

### ***Midterm Review Sheet***

The following topics are all fair game for the midterm:

- PostgreSQL installation, configuration, and usage
- Data modeling (overall flow/concepts, UML, E-R)
- Use case modeling
- Relational data model
  - Structure (relations, tuples, attributes, keys, schemas, notation)
  - Algebra (fundamental and advanced operations)
- SQL (DDL, DML)
- Relational database mapping
- A little bit of relational database programming

By popular demand, we'll make this an open-computer test. But remember — with great power comes great responsibility, so with a computer (and the Internet) at your fingertips, you'll be asked to do *more* and to do it *more accurately*. The questions will generally correspond to the assignments that you have done so far:

- Draw a data and/or use case model
- Map a UML or E-R data model to the relational model
- Draw a relational schema diagram
- Express relational algebra queries
- Define a relational database using SQL
- Write inserts, updates, deletes, and queries in SQL
- Write some Java/JDBC code (not an entire program; mainly fragments — for now)

Textbook reading includes: SKS Chapters 1–4, SKS Chapter 6, and portions of SKS Chapter 26. Good luck and have fun!