

# **CSCE 520 – Spring 2008**

## **First Midterm Examination Study Guide**

**The first midterm examination for CSCE 520 will be given on Tuesday, February 26. It will be closed book and notes.**

**Topics to be covered are listed below:**

### **Chapter 1: The Worlds of Database Systems**

Types of questions to expect: Distinguishing DB vs. DBMS. Explaining basic DBMS components.

Skip for now: Transactions/ACID (Section 1.2.4).

### **Chapter 2: Relational Database Modeling**

Types of questions to expect: Defining basic relational terms. Specifying schemas. Creating tables. Writing relational algebra queries. Specifying keys; Identifying differences between SQL systems and relational systems. Explaining referential and entity integrity.

### **Chapter 4: High-Level Database Models**

Types of questions to expect: Constructing an E/R diagram. Converting an E/R diagram to a relational schema.

Skip for now: ODL. UML (Sections 4.7-4.10).

### **Chapter 5: Relational Database Programming**

Types of questions to expect: Writing relational algebra queries using extended operators.

Skip for now: Datalog (Sections 5.3, 5.4)

### **Chapter 6: The Database Language SQL**

Types of questions to expect: Writing SQL queries. Handling NULLs. Comparing SQL and relational algebra.

Skip for now: Transactions (Section 6.6).