

CS 445 Databases Study Guide Exam 1

- ▶ Describe
- ▶ Explain
- ▶ Why

Know and understand the advantages of using a DBMS over a text file/xml/file system/shoe box.

Features of a DBMS.

Know and understand the design steps,

- ▶ products of design steps
- ▶ purpose
- ▶ audience

Differences between Semantic/Relational models

Be able to explain/use Entity/Relationship/Primary Key/Candidate Key/Weak Entity/Class Hierarchy/Role
Relate these to the Real World

Be able to determine when to use an Entity/Relationship/Descriptive Attribute

Key constraint/Participation constraint

- ▶ identify/draw/explain
- ▶ A student takes exactly one course.

You will need to draw a small ER diagram.

Be able to describe all the pieces of an ER diagram.

Given a small E-R diagram, be able to answer questions about what data it can store/queries it can answer.

- ▶ how would you change the ER diagram to satisfy these requests?

Given a set of CREATE TABLE statements, build some simple SQL queries to satisfy users' requests.

Select, join, sort, group by.
no views, subqueries