

ITM 315 – Spring 2012 Database Systems

Professor: Karen Corral
Office: B213C

Office Hours: M/W 1:30-2 and by appointment
E-mail: KarenCorral@BoiseState.edu

Course objectives: Databases are fundamental to the successful operation of all organizations. ITM 315 introduces database theory, design, and implementation. Topics covered will include data modeling using the entity-relationship (ER) model, logical database design using the relational data model, SQL, and database implementation. The emphasis will be on database design, development and implementation in the context of solving business problems.

Course materials:

- ◆ *Data Management: Databases and organizations*, 5th edition, Richard T. Watson published by Wiley
- ◆ Class notes from BlackBoard
- ◆ Optional: any Access 2010 guide book

Expectations: The topics covered in this course are difficult to master without substantial effort. You will need a great deal of time outside of class for practicing the material (plan on a minimum of 2 hours for every hour in class). Read the assigned material in the textbook and complete the assignments. New concepts build on earlier concepts. Attendance is *strongly* suggested. If a student must miss a class, he/she is responsible for getting a copy of the assignment from his/her classmates or the class website. There will be no extra credit.

Course requirements: Your course grade will be based on your performance on two midterm exams, homework assignments, and a final exam.

- ◆ Homework (20% of grade): assigned throughout the semester (both in- and out-of-class assignments)
- ◆ 1st Midterm exam (20% of grade): Wednesday, Feb. 15
- ◆ 2nd Midterm exam (25% of grade): Wednesday, Mar. 21
- ◆ Final (30% of grade): Monday, May 7th 1-3pm

Exam policy: No make-up exams will be given without a written medical excuse. Cell phones, computers, and any other electronic device are expressly prohibited from exams for any purpose.

E-mail communication: All communication via e-mail should be professional in form, content, and tone. That means that the message should have a subject indicating it is for ITM 315 and begin with a salutation and the body should explain the purpose of the message in formal English. The message should be signed with your full name and noting the section in which you are enrolled. Messages not conforming to this requirement will not be answered.

Grading policy: Late penalties: any homework or project not turned in on time will be lowered 10% per day. If the assignment is to be provided in hard copy, it should be given to the professor (in person) or if that is not possible, to the Information Technology and Supply Chain Management Department office (B308) where it will be time stamped (it is the student's responsibility to request a time stamp). Assignments without time stamps will be checked in on the date the professor receives them.

Previous experience has shown that grades approximate the straight scale quite closely (i.e., 60 ≤ 70 D; 70 ≤ 80 C; 80 ≤ 90 B; 90 ≤ 100 A).

**Academic Honesty (taken from the course catalog for 2008-2009
<http://registrar.boisestate.edu/Catalogs/08-09undergrad-catalog/Chapter2-08-09.pdf>):**

The university’s goal is to foster an intellectual atmosphere that produces educated, literate people. Because cheating and plagiarism are at odds with that goal, they shall not be tolerated in any form. Students are expected to adhere to the rules and regulations as set forth in the Student Code of Conduct. Therefore, all work submitted by a student must represent that student’s own ideas and effort; when the work does not, the student has engaged in academic dishonesty.

Plagiarism occurs when a person passes in another person’s work as his or her own or borrows directly from another person’s work without proper documentation. For example, academic dishonesty occurs whenever a student:

- buys a paper or other project, then seeks to receive credit for the paper or project
- copies from another student’s exam, either before, during, or after the exam
- uses “crib notes” while taking an exam or uses information stored in a computer or calculator (if prohibited from doing so)
- allows another person to take an exam in his or her place or takes an exam for another person
- collaborates on take-home exams when such collaboration is forbidden
- copies the work of another person and attempts to receive credit for that work
- fails to properly document source material in a paper or project
- receives editorial assistance that falls outside the scope of acceptable assistance

NOTE: The list above is intended only to provide general guidelines for recognizing and avoiding common types of academic dishonesty. It is in no way an exhaustive or comprehensive list of all the types of academic dishonesty.

Except in cases of major offenses, responding to academic dishonesty is the responsibility of the instructor of the course in which the dishonesty occurs. If a student is responsible of academic dishonesty, the student may be dismissed from the class and may receive a failing grade. Other penalties may include suspension or expulsion from school.

Course Objectives

Students in this class will learn or practice the following COBE Core Curriculum concepts, methods, and skills:	
1. Understand and apply analytical and disciplinary concepts and methods related to business and economics:	
<input checked="" type="checkbox"/>	1.5. Information Technology Management
<input checked="" type="checkbox"/>	3. Solve problems, including unstructured problems, related to business and economics

Statement of Shared Values

Boise State University upholds the following values as the foundation for a civil and nurturing environment. Campus community members and all who are part of COBE are expected to adhere to the following values.

Academic Excellence – engage in our own learning and participate fully in the academic community’s pursuit of knowledge.

Caring – show concern for the welfare of others.

Citizenship – uphold civic virtues and duties that prescribe how we ought to behave in a self-governing community by obeying laws and policies, volunteering in the community, and staying informed on issues.

Fairness – expect equality, impartiality, openness and due process by demonstrating a balanced standard of justice without reference to individual bias.

Respect – treat people with dignity regardless of who they are and what they believe. A respectful person is attentive, listens well, treats others with consideration and doesn’t resort to intimidation, coercion or violence to persuade.

Responsibility – take charge of our choices and actions by showing accountability and not shifting blame or taking improper credit. We will pursue excellence with diligence, perseverance, and continued improvement.

Trustworthiness – demonstrate honesty in our communication and conduct while managing ourselves with integrity and reliability.

Tentative* Class Schedule

Week	Date	Topic	Reading & Assignments
Week 1	1-18	Introduction & Database Development Process	
Week 2	1-23	Data Modeling	Chapters 1, 2, 3 (pp. 55-62)
	1-25	Data Modeling, continued	Chapter 3 (pp. 55-62) Assigned: HW 1
Week 3	1-30	MS Access	
	2-1	SQL for Single Tables	Chapter 3 (pp. 62-81) Due: HW 1; Assigned: HW 2
Week 4	2-6	SQL for Single Tables, continued	
	2-8	One-to-Many Relationships	Due: HW 2
Week 5	2-13	Review	Chapter 4 (pp. 96-105)
	2-15	Exam	
Week 6	2-20	President's Day holiday	
	2-22	Exam returned SQL for Two Tables	Chapter 4 (pp. 89-95) Assigned: HW3
Week 7	2-27	Many-to-Many Relationships	Chapter 5 (pp. 113-118)
	2-29	Data Modeling	Chapter 7 Due: HW 3
Week 8	3-5	Data Modeling	
	3-7	One-to-One Tables and Recursive Relationships	Chapter 6 (pp. 135-148) Assigned: HW 4
Week 9	3-12	One-to-One Tables and Recursive Relationships	
	3-14	SQL – DDL, DML	Chapter 10 (pp. 262-272) Due: HW 4
Week 10	3-19	Review	
	3-21	Exam	
Week 11	3-26/28	Spring Break	
Week 12	4-2	Return exam Practice SQL	
	4-4	Practice SQL	Assigned: HW 5
Week 13	4-9	Normalization, continued	Chapter 8 (pp. 211-216)
	4-11	Normalization, continued	Due: HW 5
Week 14	4-16	Normalization, continued	
	4-18	Normalization, continued	Assigned: HW 6
Week 15	4-23	Data Warehousing	Chapter 15 (pp. 433-446)
	4-25	Data Warehousing, continued	Due: HW 6
Week 16	4-30	Review	
	5-2	Review	
Week 17	5-7	Final exam	

*This is a very tentative schedule. More accurate schedules will be shown in class in two-week segments. You should read the chapters before the class we will be discussing the material.