BCIS 4620-001: INTRODUCTION TO DATABASE APPLICATIONS

CLASS TIME: 2 – 4:50 pm, F
CLASSROOM: BLB 015
INSTRUCTOR: Dr. Bin Mai
OFFICE: BLB 385D (940-565-3345)
E-MAIL: bin.mai@unt.edu
OFFICE HOURS: 5:30 – 6:30 pm, R, 12 – 2 pm, F; and by appointment

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COURSE PREREQUISITES:
A grade of "C" or better in each previously taken ITDS course or consent of the Department. UNT GPA of 2.70 or higher. BCIS 3610 and BCIS 3630 or BCIS 3620.

TEXTBOOKS (REQUIRED):
Database Systems: Design, Implementation, and Management 11th Edition
Author: Carlos Coronel | Steven Morris
ISBN-10 1285196147, ISBN-13 9781285196145

COURSE FORMAT:
This course is an intensive learning experience. The amount of knowledge gained is limited only by each individual's motivation and interest. Students will study all required readings, complete several individual programming assignments, and participate in class discussions. There will be required examinations.

COURSE OBJECTIVES;
BCIS 4620 is an introduction to database and database management technology within the framework of a business environment. It includes the study of the analysis, design, development, and implementation of database-oriented business applications. Upon completion of the course the student will be able to define, load, and navigate a database system [IBMS's DB2] using both COBOL with embedded SQL and SQL query language. Students will also learn to use an Entity-Relationship data modeling tool.

TUTORS:
Specialized tutorial assistance will be provided for students registered in this class. The location, date, and times for this service will be announced in class and also on Blackboard. The tutor's primary responsibility is debugging assistance. Each student is responsible for the successful completion of all assignments. The tutor is NOT responsible for incorrect interpretations of assignment instructions. The tutor is NOT to do the assignments for you.

SCHEDULE

Date	TOPICS & DELIVERABLES	READINGS
1/23	Course Introduction/Syllabus etc…	
1/30	Introduction & Database Systems	Chapter 1
2/6	Data Models	Chapter 2
2/13	The Relational Database Model **DUE:** H1: Mainframe Basics	Chapter 3
2/20	Exam 1 (Chapters 1-3, Mainframe Basics) E-R Modeling	 Chapter 4
2/27	E-R Modeling and Advanced Data Modeling **DUE:** H2: Introductory Mainframe Exercise	Chapter 4, 5
3/6	Normalization of Database Tables **DUE:** H3: ER Model	Chapter 6
3/13	Exam 2 (Chapters 4-6, Mainframe Skills) **DUE:** H4: Normalization Introduction to Structured Query Language (SQL)	 Chapter 7
3/20	Spring Break	YEAH!!!
3/27	SQL Introduction and Advanced SQL ***DUE:*** *Project Part 1: ERD*	Chapters 7, 8
4/3	Database Design	Chapters 9
4/10	Exam 3 (Chapters 7-9) DB2 Application Programming **DUE:** H5: SQL1	
4/17	Transaction Management and Concurrency Control **DUE:** H6: SQL2	Chapter 10
4/24	Database Performance Tuning and Query Optimization **DUE:** H7: SQL3	Chapter 11
5/1	Database Administration and Security **DUE:** H8: DB2 Application Programming	Chapter 15
5/8	Exam 4 (Chapters 10, 11, 15, DB2 Programming) ***DUE:*** *Complete Final Case Project*	

ASSIGNMENTS:

All assignments are designed to provide an environment to practice and refine your programming development and debugging skills. As such, they require application of **all** programming and system knowledge gained in the previous courses. From experience with previous students, these assignments are extremely difficult to complete with any level of proficiency if started late and

rushed. As assignments, they are an integral part of the learning process required to master course material. Assignments should be started AS SOON AS POSSIBLE, AND FINISHED BEFORE THEY ARE DUE. Exams will cover material from lectures, reading assignments, and skills learned from the computer assignments. Failure to complete an assignment will be detrimental to your grade on the project as well as on the quiz.

GRADING:

Homework/Exams	**Due Date**	**Points**
Exam 1	2/20	100
Exam 2	3/13	100
Exam 3	4/10	100
Exam 4	5/8	100
H1: Mainframe Basics	2/13	40
H2: Introductory Mainframe Exercise	2/27	40
H3: ER Model	3/6	40
H4: Normalization	3/13	40
H5: SQL1	4/10	40
H6: SQL2	4/17	40
H7: SQL3	4/24	40
H8: Application Program	5/1	40
P1: Project Part 1 - ERD	3/27	40
P2: Final Case Project Folder	12/8	90
	Total Points	**850**

- All exams are closed-book. All exams are given during the first half of class (2 – 3:20 pm). Classes resume at 3:30 pm.
- All homework and projects must be submitted as hard copies (printouts), unless notified otherwise. They must be submitted at the beginning of the class at the due date as noted

GRADE DISTRIBUTION:

PERCENT	**GRADE**
90.0% +	A
80.0% - 89.9%	B
70.0% - 79.9%	C
60.0% - 69.9%	D
Lower than 60.0%	F

COURSE POLICY:

- You should complete all reading assignments prior to class. Written assignments are due at the **beginning of class** on the due date. **Late assignments will not be accepted** and a grade of zero will be assigned for the missing work. Incomplete or incorrect assignments will be heavily penalized. Graded assignments may be picked up at class or from my office (during office hours).
- If you know **beforehand** you will miss an exam, it is your responsibility to discuss with the instructor **in advance**, and arrange to take the exam **earlier**. If you already miss an exam, the missed exam will automatically be made up with a **comprehensive final** exam at the end of the semester. The comprehensive final exam can make up **only one** missed exam.
- The grade of "I" is not given except for appropriately documented emergencies (illness or death) and then only within the guidelines of stated University policy.
- Students will adhere to the highest professional and ethical standards. All work submitted will be the result of each individual student's own effort only. Cheaters are penalized to the maximum allowed by University policy which includes a final course grade of "F" and referral to the Dean of Students for disciplinary action.
- Cheating includes collaboration on any outside assignments which might be made on an individual basis for a grade, including regular homework assignments and the preparation of programs for submission. It also includes plagiarism, unauthorized preparation of notes for use on examinations, use of such notes during an examination, looking at another student's examination answers, allowing another student to look at you own examination answers, or the requesting or passing of information during an examination.
- The abuse or misuse of the University and College of Business resources is both unethical and unprofessional. Misuse includes the use of these resources for non-University related activities as well as the electronic theft (copying) of the work of others. Such activities will result in a grade of F in the course and referral to the Dean of Students for the appropriate disciplinary action.
- The College of Business Administration complies with the Americans with Disabilities Act in making reasonable accommodation for qualified students with disability. If you have an established disability, as defined in the Americans with Disabilities Act and would like to request accommodation, please see me as soon as possible. You should bring with you the appropriate materials from the Disabilities Accommodation Office.