SYLLABUS
ISM 218-01: Database Systems
(Spring 2025
Prerequisites: C or better in ISM110 or equivalent)

Class time: Monday and Wednesday 2:00 – 3:15 pm
Classroom: Bryan Building 105; Online
Credits: 3 credit hours

Instructor: Shimi Zhou
Email: s_zhou2@uncg.com
Office hours: Monday 4-5 pm (Via Teams); Wednesday 4–5 pm (In-person), Bryan Building 489

Course Description and Objectives
The course can be described as follows:

"Study of database management systems including their design, implementation, query and use. Includes an extensive case study requiring the development of a multiple table database system for organizational needs."

In this course, we address the design of databases and the use of database management systems (DBMS). Since data becomes an intrinsic part of our lives, it is important to understand how data is stored and managed. Data needs to be collected, stored, archived, retrieved and processed in an organized way such that it can be utilized for better insights. Many databases and DBMSs support such a need. In the class, we aim to foster a basic understanding of and skills in database design and its implementation. Specifically, the objective of this course can be summarized into two-fold, as follows:

1. Provide an introduction to the design of relational databases through the use of Entity-Relationship Diagrams and Normalization procedures and
2. Develop basic skills in the use of SQL in defining and creating a database, inserting and modifying entries in a table, and manipulating the database to produce useful decision-making information for management.

Note that this course is designed to ensure that students can grasp the fundamental concepts of database systems. Since this course is introductory and prior knowledge is not required, students can have varying backgrounds in terms of education, business experience, and technology knowledge. This course assumes that students are new to the topics that are addressed in the class. For those of you who have more extensive knowledge about databases/DBMS, be patient with the pace of the class and consider our class meetings a chance to strengthen your base knowledge.

Acquired Knowledge

Upon successful completion of the course, students are expected to 1) develop and implement a sound data model for a business data system, 2) design, implement, and use a relational database, 3) use SQL to create complex queries, generate reports and administer a database, and 4) be familiar with how database systems are used in various types of businesses.

Textbook

Jukic, N., Vrbsky, S., and Nestorov, S. *Database systems: Introduction to databases and data warehouses*. 2nd Edition, Prospect Press, 2021

ISBN (eBook): 978-1-943153-67-1
ISBN (Paperback): 978-1-943153-68-8

* eBooks are encouraged for cost savings, but it is at your discretion.

* eBook can be purchased from the publisher's website (https://www.prospectpressvt.com/textbooks/jukic-database-systems-introduction-to-databases-and-data-warehouses-2-0Links to an external site.) or its distributors, Redshelf and VitalSource (redirected through the publisher's web page), while paperback is available only from Redshelf.

Grading

Individual Assignments	20%
Quizzes and Discussion	10%
Group Project	25%
Midterm Exam	20%
Final Exam	25%
Total	100%

Final letter grades will be given based on the following grading scale:

Points	Grade
93-100%	A
90-92%	A–
87-89%	B+
83-86%	B
80-82%	B–
77-79%	C+
73-76%	C
70-72%	C–
67-69%	D+
63-66%	D
60-62%	D–
Below 60%	F

- Your total score will be rounded up; For example, if your total is 89.2%, your letter grade will be B+.

- There is **NO** makeup or rescheduled assignments/quizzes/exams if anyone misses. The only exception is an emergency case, such as medical situations or immediate family loss. In this case, you are **required to submit proof of document** and contact the instructor **BEFORE** the deadline.
- A "Group" project is a group's work. If students are not willing to contribute to the group work and are not cooperative (e.g., lack of communication or less/late work) with the group project, he/she will be identified as free riders. If reported by other group members, a letter grade goes down regardless of the situation.
- All the assignments are due by 11:59 pm on the scheduled due date. It is the student's responsibility to be aware of deliverable due dates. Makeup assignments will **NOT** be given. Late submissions will **NOT** be accepted. It is the responsibility of the student to notify the instructor promptly (in advance if possible) of any issue that may impact the completion of any work by the scheduled completion date.

Students Responsibility

- *Canvas*: All related resources, including course materials, assignments, and announcements, will be posted on Canvas. Students are highly encouraged to check Canvas regularly.
- *iSpartan email***:** In addition, the course updates will be communicated through UNCG iSpartan email. Students are responsible for checking those updates regularly on your own.
- *End-semester course evaluation*: Students are highly encouraged to complete an online course evaluation near the end of the course. This evaluation is important to the instructor and the university in our efforts to continually improve the delivery of our courses.

Guidelines For Ethical and Professional Behavior Of Students and Faculty

The administration, faculty, staff, and students of the Bryan School of Business and Economics at UNCG are committed to ethical and professional behavior in all areas of their academic and professional lives. The values, principles and expectations established in this document and the addendums encompass many aspects of professional behavior and integrity. It is not an exhaustive list, since change is part of life both inside and outside the university. It is further noted that all expectations and principles discussed in this document apply to all modes of communication or course delivery.

This set of Guidelines constitutes a statement of values, principles, and expectations; concerns and issues are still best addressed by conversations between the individual faculty member and student. If further discussions are necessary, Department Heads may be contacted by either faculty or students.

Complete guideline can be found at: https://bryan.uncg.edu/wp-content/uploads/2023/11/Faculty-and-Student-Guidelines-2018-2019.pdf.

Academic Integrity Policy

University students are expected to conduct themselves in accordance with the highest standards of academic honesty. A student is subject to penalty for academic misconduct, such as illicit possession of exams or exam materials, forgery, or plagiarism. Plagiarism is the presentation of

the work of another, as one's own work. Discussing your assignments with other students can be a valuable learning resource; however, each student is expected to do their own original work. It is the student's responsibility to prove their work is original, if challenged.

By submitting an assignment, each student is acknowledging their understanding and commitment to the Academic Integrity Policy on all major work for the course (please take your time to review the Academic Integrity Policy if you are not comfortable with by using the following link: https://osrr.uncg.edu/academic-integrity-policy-pledge/).

Generative AI Use Policy

We expect that all work students submit for this course will be their own. In instances when collaborative work is assigned, we expect for the assignment to list all team members who participated. We specifically forbid the use of generative artificial intelligence (GAI) tools at all stages of the work process, including preliminary ones. Violations of this policy will be considered violations of the Academic Integrity policy. We draw your attention to the fact that different classes may implement different GAI policies, and it is the student's responsibility to conform to expectations for each course. (Adapted from Harvard University)

Accommodations/ADA Statement

UNCG seeks to comply fully with the Americans with Disabilities Act (ADA). Students requesting accommodations based on a disability must connect with the Office of Accessibility Resources and Services (OARS) in 215 Elliott University Center, (336) 334-5440, oars.uncg.edu.

Absences for University-Sponsored Activities

The university recognizes the importance of certain extra-curricular and co-curricular activities (including travel days) that enhance student learning, personal development, and professional growth. Instructors will excuse absences of students for participation in University-sponsored events under the following conditions:

1. Students who expect to miss one or more class meetings due to participation in University-sponsored activities should:
   a) Notify the instructor(s) at least five class days in advance;
   b) Arrange to complete all missed work in advance of the absence whenever practicable as judged by the instructor(s). When missed work cannot be completed in advance, the instructor(s) should provide students with the opportunity to make up the work. Students should be aware, however, that not all kinds of work can be made up. The instructor(s) have the discretion to deny makeup work if (i) alternative assignments place an unreasonable demand on the instructor, (ii) the original assignment is such that not completing it at the originally assigned time impedes student learning
   c) Present relevant documentation of participation in a relevant University-sponsored activity to the instructor(s) upon request.

Students who expect to miss more than three class periods of any single course of any kind in a term or more than two consecutive meetings of a laboratory course in order to participate in University-sponsored activities should inform the instructor at the beginning of the course. In the case that the faculty member cannot make reasonable accommodations for makeup work, the student may appropriately be advised to drop the course.

Course Schedule (It is tentative and subject to changes)

Week	Dates	Topics
1	Jan 13-Jan 19	Course Introduction and Chapter 1
2	Jan 20-Jan 26	Chapter 2
3	Jan 27-Feb 2	Chapter 3
4	Feb 3-Feb 9	Chapter 4
5	Feb 10-Feb 16	Chapter 5-1
6	Feb 17- Feb 23	Chapter 5-2
7	Feb 24-Mar 2	Lab session
8	Mar 3-Mar 9	Midterm Exam
9	Mar 10-Mar 16	Enjoy your break!
10	Mar 17-Mar 23	Chapter 6
11	Mar 24-Mar 30	Chapter 7
12	Mar 31-Apr 6	Chapter 8-1
13	Apr 7-Apr 13	Chapter 8-2
14	Apr 14-Apr 20	Chapter 9
15	Apr 21-Apr 27	Chapter 10 & 11
16	Apr 28-May 4	Final Exam