

## INFO 3233-002 SPRING 2020 Data and Information Management

**Instructor:** Dr. Ram Kumar

**Office:** 203B Friday

**Phone:** 704.687.7605

**Email:** [rkumar@uncc.edu](mailto:rkumar@uncc.edu)

**Office Hours:** T-TH 2.30-4.30PM (203B- Friday) and by appointment

**Class Hours:** T.TH (8.30 AM-9.45 AM)

**Venue:** Friday 130

### Overview

- *This syllabus contains the policies and expectations for this course. Please read the entire syllabus carefully. The standards and requirements set forth in this syllabus may be modified at any time by the instructor.*
- *Notice of such changes will be by announcement in class and/or by changes to this syllabus posted on the course Canvas website.*

### Catalog Description

A study of and implementation of databases for business applications. Exploration of basic concepts of design and the use of SQL to create and manipulate corporate databases.

**Pre- or Corequisite(s):** INFO 3130 with grade of C or above; and Junior standing or permission of department.

### Course Learning Objectives

1. To be familiar with the database terminology used to support business.
2. To develop the ability to effectively design and implement relational databases for business.
3. To understand data modeling and the application of both the entity-relationship and normalization approaches to the design of relational databases.
4. To use DBMS software to structure, query and update databases through the use of SQL.

### Course Materials

- **Textbook:** Coronel, C., Morris, S., and Rob, P. Database Systems: Design, Implementation, and Management, 12th Edition, Course Technology (ISBN ) **\*\*Note: A bundle containing only the chapters we will be using is available at the campus bookstore and at Grays. Alternatively, you may purchase the complete 10<sup>th</sup> Edition of the textbook from an online source. The editions are virtually the same. \*\***
- **Textbook student website:** contains video tutorials, datasets, interactive quizzes, solutions to select problems, PowerPoint presentations, and the textbook Appendices.
- **Other readings and helpful documents will be posted on Canvas.**

## Grading

**Exams:** Four equally weighted exams will be given in this course: three during the semester plus a comprehensive final. However, only three of the exams will be counted towards the grade. Students may take all four exams and drop the one with the lowest grade.

**Assignments & Project:** Assignments & Projects are to be completed in groups of 4 (preferable) or so per **the date due on the syllabus.**

All members in a group are expected to contribute. If a group member does not contribute, the rest of the members may, after a consensus agreement and the consent of the instructor, ask him/her to leave the group. **The maximum project grade for students not belonging to a group will be a B. TEAM EVALUATIONS ARE EXPECTED AND THE INSTRUCTOR MAY ASSIGN INDIVIDUAL GRADES THAT ARE DIFFERENT FROM THE GROUP GRADE**

**Attendance & Participation:** Attendance & participation are required.

Component	Points
Exams (3@225)	675
Project	140
Assignments (2)- ERD and Normalization	60
Attendance & Participation (25 attendance, 25 in-class participation, 50 quizzes, 25 homework)	125
<b>Total</b>	<b>100%</b>

Attendance grading-(% ATTENDANCE TIMES 25)

In class participation grading-Based on answering question in class, and timely submission of all course components.

Quizzes -Five online quizzes (50 questions x 1.0 points). Multiple attempts allowed. Must be completed by respective due dates.

Homework- Several small homework problems will be given during the semester. These will count towards class participation and can be completed by GROUPS OF 2. However, each student should submit these assignments and be prepared to answer questions regarding these assignments in class. Assigned homework (ungraded) must be completed and turned in by due dates.

The final letter grade will be calculated based on the following scale:

A: 90% and above; B: 80-89.9%; C: 70-79.9%; D: 60-69.9%; F: Below 60%.

## Other Class Policies

### **Attendance and Participation Policy**

Attendance and participation are expected since they are part of ACTIVE LEARNING. Attendance may be taken RANDOMLY IN CLASSES AND at any point during the class (beginning, middle, and end). Tardiness or early departure are disruptive since they affect others in the class and are, of course, discouraged and will be reflected in the attendance grade as absences. Absence from a class session also implies zero participation for that session.

Absences from class may be excused by the instructor for such reasons as personal illness, religious holidays, or participating as an authorized University representative in an out-of-town event. Whenever possible, students are expected to seek the permission of the instructor prior to absences. Appropriate documentation may be requested

Every student is expected to study the textbook and other posted materials (notes, solutions, etc.) **prior to each class session.** Students must be prepared to answer questions on the "current" topic.

Discussion questions and quizzes may be used to evaluate preparation/participation and the results will be combined with the attendance record.

Students will be held responsible for any material covered, announcements made, assignments passed out, and any other type of work that they may miss during any absence from class.

### **Exams**

Make-up exams will NOT be given except in cases of serious medical emergencies as evidenced by a written doctor's excuse. Permission must be obtained from the professor prior to the scheduled exam time. Students missing an exam with an approved excuse will be allowed to make up the exam with the professor's approval during the final exam period. There will be no make-up for the comprehensive final.

**Exam reviews will be available during office hours or by appointment for one week after exam grades are posted.**

Exams are a form of intellectual property belonging to those who create them (your professors). Consequently, exams must remain in my possession or under my control at all times. This means that exams may not be taken out of the room or copied. Students are encouraged to review their exams during office hours or by appointment. However, failure to return an exam after taking or reviewing it or removing an exam from my presence at any time or copying an exam will be considered theft of intellectual property. Such action will result in an exam grade of zero and may warrant further disciplinary action.

### **Assignments/Projects**

This 3-credit course requires three hours of classroom or direct faculty instruction and six hours of out-of-class student work each week for approximately 15 weeks. Out-of-class work may include but is not limited to: required reading, library research, written assignments, and studying for quizzes and exams.

You must complete each individual project/assignment on your own unless it is a group assignment. Any sharing between students will be considered a violation of the Academic

Integrity Code and will result at a minimum in a grade of zero for the project/assignment with a possibility for further disciplinary action.

**Peer reviews will be factored into the individual grades for group work.**

**Due Dates Policy**

A deadline is like a ticket for a cruise. If you arrive after the scheduled departure time, the ship will have sailed without you and your ticket (homework) will be worthless. Written homework must be handed in within 5 minutes of the scheduled start time for the class period on which it is due. Late homework will not be accepted, and you will receive a zero for that assignment. If you know you will miss class, make arrangements to turn in your work ahead of time.

**Grade Appeals Policy**

If you believe that the grade you received on an assignment or an exam was in error or unfair, you can appeal to the professor in writing within 7 calendar days after the grades are posted. The appeal should clearly state the reasons why you believe the grade to be unfair or the nature of the error. Overdue appeals will not be considered.

**Class Behavior Policy**

Disruptive behavior distracts from the ability of others to profit from their in-class experience. Such behavior includes but is not limited to arriving late, leaving early, having side conversations, making unnecessary comments that add no value to the class, surfing the net, and any activities that negatively impact the ability of other students to learn and/or listen in class.

It is expected that students will behave professionally. Since it is my responsibility to provide an environment that is conducive to learning for everyone in the class, The instructor reserves the right to deduct points for inappropriate behavior.

**Electronic Devices in Class**

**Use of computing, communication, or other devices during the class time for purposes other than those required for the class is prohibited and may result in being asked to leave the classroom for the remainder of the class period.** This includes the use of laptops, lab computers, phones or other devices for Internet browsing, game playing, reading news, emailing, texting, chatting, IM, Facebook, or other activities not required for the class. **Cellular phones and other communication devices must be silenced and stored away during class.**

**Academic Integrity**

As a program that helps to create business and government leaders, the College of Business has an obligation to ensure academic integrity is of the highest standards. Standards of academic integrity will be enforced in this course.

University regulations will be strictly enforced in all cases of academic irregularities, cheating or plagiarism or any variations thereof. Students assume full responsibility for the content and integrity of the academic work they submit. The guiding principle of academic integrity shall be that a student's submitted work, examinations, reports, and projects must be his/her own work.

All UNCC students have the responsibility to be familiar with and to observe the requirements of The **UNCC Code of Student Academic Integrity** (see the Catalog and also <http://integrity.uncc.edu/>). This code forbids cheating, fabrication or falsification of information, multiple submission of academic work, plagiarism of written materials and software projects, abuse of academic materials (such as library books on reserve), and **complicity in academic dishonesty** (helping others to violate the code). Additional examples of violation of the Code include:

- Representing the work of others as your own.
- Using or obtaining unauthorized assistance in any academic work.
- Giving unauthorized assistance to other students.
- Modifying, without instructor approval, an examination, paper, record, or report for the purpose of obtaining additional credit.
- Misrepresenting the content of submitted work.

For this course, it is permissible to assist classmates in general discussions about the homework. General advice and interaction are encouraged. Each person, however, must develop his or her own solutions to the assigned homework and laboratory exercises. Students may not "work together" on graded assignments, unless it is a group assignment. A student may not use or copy (by any means) another's work (or portions of it) and represent it as his/her own. If you need help on an assignment, contact your instructor or the TA, not other classmates.

Any further specific requirements or permission regarding academic integrity in this course will be stated by the instructor, and are also binding on the students in this course. Students who violate the code can be punished to the extent of being permanently expelled from UNCC and having this fact recorded on their official transcripts. The normal penalty is zero credit on the work involving dishonesty and further substantial reduction of the course grade. In almost all cases, the course grade is reduced to "F."

If you are unclear about whether a particular situation may constitute an honor code violation, you should meet me to discuss the situation. Feel free to discuss the definition of cheating and/or plagiarism with me if you are unclear on these terms or have questions about the acceptability of a particular type of action.

The instructor may ask students to produce identification at examinations and may require students to demonstrate that graded assignments completed outside of class are their own work.

### **Disability Accommodations**

Students in this course seeking accommodations to disabilities must first consult with the Office of Disability Services and follow the instructions of that office for obtaining accommodations. If you have a disability that qualifies you for academic accommodations, please provide a letter of accommodation from the Office of Disability Services. For more information regarding accommodations, please contact the Office of Disability Services at 704.687.4355 or stop by their office in 230 Fretwell.

### **Diversity**

The Belk College of Business strives to create an inclusive academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity

that includes, but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.

**Incomplete Grade Policy**

Receiving a grade of incomplete (“I”) is not based solely on a student’s failure to complete work or as a means of raising his/her grade by doing additional work after the grade report time. An incomplete grade can be given only when a student has a serious medical problem or other extenuating circumstance that legitimately prevents completion of required work by the due date. In any case, for a student to receive an 'I' grade, the student's work to date should be passing, he/she must have completed a significant portion of the course, and the student must provide proper written proof (e.g., a doctor's note) of the extenuating circumstances.

**Religious Accommodation for Students Policy**

The instructor will observe University Policy 409 (<https://legal.uncc.edu/policies/up-409>) on matters of religious accommodation. Please note that the procedure prescribed by this policy requires a notice to the instructor prior to the census date of the semester (typically the tenth day of instruction).

**Course Changes Policy**

The instructor reserves the right to make any necessary changes to the course content, schedule, and policies. Changes will be announced in class and will also be posted online.

**Tentative Class Schedule (Maybe modified at the discretion of the Instructor)**

<u>Date</u>	<u>Topic</u>	<u>Assigned Reading</u>	<u>Due Dates</u>
Jan. 9	Introduction and Course Overview	Ch. 1	
14	Data Models	Ch. 2	<b>Group Formation</b>
16	Data Models	Ch. 2	<b>Ch. 2 HW, Quiz</b>
21	The Relational Database Model	Ch. 2/3	
23	The Relational Database Model	Ch. 3	
28	ER Modeling	Ch. 3/4 & Apx. A	
30	ER Modeling	Ch. 4 & Apx. E	<b>Ch. 3 HW, Quiz</b>
Feb. 4	ER Modeling	Ch. 4 & Apx. E	
6	Advanced Data Modeling	Ch. 4/5	<b>Ch,4 Hw,Quiz</b>
11	<b>Exam 1 (Chapters 1-4)</b>		
13	Advanced Data Modeling	Ch. 5	
18	Normalization	Ch. 5/6	<b>Assignment 1 (ERD)</b>
20	Normalization	Ch. 6	<b>Ch. 5 HW Quiz</b>
25	<u>Normalization</u>		<b>Project Topic</b>
27	Normalization	Ch. 6	<b>Ch. 6 HW, Quiz</b>
March 10	Normalization Assignment and Project		<b>Project Phase 1</b>
12	Catchup and Review	Ch. 6	<b>Assign. 2 (Normalization) &amp; Peer Evals- Due 15th</b>
17	<b>Exam 2 (Chapters 5, 6; 9 as bonus)</b>	Ch. 6	
19	SQL Lab		
24	SQL Lab		
27	SQL Lab		<b>Project Phase 2</b>
31	SQL Lab		
April 2	SQL Lab		<b>SQL Homework</b>
7	SQL Lab & Review		
9	SQL LAB& REVIEW		
14	<b>Exam 3 (SQL)</b>		
16	DATA WAREHOUSING/BIG DATA		<b>Project version 1 and Presentation due</b>
21	Projects		
23	Projects		
28	PROJECTS		<b>PROJECT VERSION 2 &amp; PEER EVALS DUE</b>
May 7	<b>Final Exam &amp; Make-Up Exams (8:00am-10:30am)</b>		