INFO 3233-002 SPRING 2021
Data and Information Management

ONLINE SYNCHRONOUS COURSE
STUDENTS ARE EXPECTED TO USE A COMPUTER WITH A WEBCAM

Instructor: Dr. Ram Kumar
Office: 203B Friday
Email: rlkumar@uncc.edu (Preferred method of contact)
Class Hours: T.TH (10AM-11.15AM)
  https://uncc.zoom.us/j/94544805294?pwd=TWtnZy9EQQ3V5RVMzM293WFdXMjRFQT09
Meeting ID: 945 4480 5294
Passcode: data2

Office Hours: T-TH 1.30pm-3.30pm
  https://uncc.zoom.us/j/94617305474?pwd=MHJscEJJsRDNYU1hoRC9VcngxTHIIZUT09
Meeting ID: 946 1730 5474
Passcode: office

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 using SQL.

Course Materials
- Textbook: Coronel, C., Morris, S., and Rob, P. Database Systems: Design, Implementation, and Management, 12th Edition, Course Technology **Note: A CUSTOM EDITION containing only the chapters we will be using is available at the campus**

- **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.**
- **Laptop/Desktop with Video Camera per the Belk College Laptop Policy**
  [https://belkcollege.uncc.edu/laptop-policy](https://belkcollege.uncc.edu/laptop-policy)
- You should download Lockdown Browser and Respondus monitor through canvas. Additional information will be provided in class.
Important Information & Policies for Fall semester

Niner Nation Cares: All students must follow the updates and instructions related to Fall semester reopening posted on http://ninernationcares.uncc.edu and https://ninernationcares.uncc.edu/students. For your own health and safety and that of your friends and families, make sure to adhere to the health and safety guidelines posted on the above links. Please do not treat these guidelines lightly.

Face coverings in classrooms and labs: It is the policy of UNC Charlotte for the Fall 2020 semester that as a condition of on-campus enrollment, all students are required to engage in safe behaviors to avoid the spread of COVID-19 in the 49er community. Such behaviors specifically include the requirement that all students properly wear CDC-compliant face coverings while in buildings including in classrooms and labs. Students are permitted to remove face coverings in classroom or lab settings only when I explicitly grant permission to do so (such as while asking a question, participating in class discussion, or giving a presentation) and while at an appropriate physical distance from others. Failure to comply with this policy in the classroom or lab may result in dismissal from the current class session. If the student refuses to leave the classroom or lab after being dismissed, the student may be referred to the Office of Student Conduct and Academic Integrity for charges under the Code of Student Responsibility.

Absenteeism during Covid-19: Students are expected to attend every class and remain in class for the duration of the session when it is safe to do so in accordance with university guidance regarding COVID-19. Failure to attend class or arriving late may impact your ability to achieve course objectives which could affect your course grade. An absence, excused or unexcused, does not relieve a student of any course requirement. Regular class attendance is a student’s obligation, as is a responsibility for all the work of class meetings, including tests and written tasks. Any unexcused absence or excessive tardiness may result in a loss of participation points.

For absences related to COVID-19, please adhere to the following:

- **Do not come to class if you are sick.** Please protect your health and the health of others by staying home. Contact your healthcare provider if you believe you are ill.
- **If you are sick:** If you test positive or are evaluated by a healthcare provider for symptoms of COVID-19, complete this form to alert the University. Representatives from Emergency Management and/or the Student Health Center will follow up with you as necessary, and your instructors will be notified.
- **If you have been exposed** to COVID-19 positive individuals and/or have been notified to self-quarantine due to exposure, complete this form to alert the University. Representatives from Emergency Management and/or the Student Health Center will follow up with you as necessary, and your instructors will be notified.

To return to class after being absent due to a COVID-19 diagnosis or due to a period of self-quarantine, students should submit an online request form to Student Assistance and Support
Services (SASS). Supporting documentation can be attached directly to the request form and should be from a student's health care provider or the Student Health Center, clearly indicating the dates of absences and the date the student is able to return to class. Instructors will be notified of such absences.

If you are absent from class as a result of a COVID-19 diagnosis or quarantine, please notify your instructor immediately and seek instructions to help you continue to make progress in the course. The specific instructions for this situation will be provided on a case-by-case basis. The final decision for approval of all absences and missed work is determined by the instructor.

**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 REQUIRED IN ORDER TO GET A GRADE FOR A PROJECT AND THE INSTRUCTOR MAY ASSIGN INDIVIDUAL GRADES THAT ARE DIFFERENT FROM THE GROUP GRADE.**

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

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams (3@225)</td>
<td>675</td>
</tr>
<tr>
<td>Project</td>
<td>140</td>
</tr>
<tr>
<td>Assignments (2)- ERD and Normalization</td>
<td>60</td>
</tr>
<tr>
<td>Attendance &amp; Participation (25 attendance, 20 in-class participation, 55 quizzes, 25 homework)</td>
<td>125</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

**** Academic integrity quiz- No points but required by the deadline on Canvas (September 15) in order to receive a grade for the course. *****

**Attendance grading-**(% ATTENDANCE TIMES 25)

**In class participation grading-**Based on answering question in class VIA ONLINE QUIZZES/CHAT/AUDIO
Quizzes: Six online quizzes Multiple attempts allowed for 5 of them. Must be completed by respective due dates.

Homework: Several small homework problems will be assigned 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 INSTRUCTOR MAY ASK STUDENTS TO EXPLAIN THEIR ANSWERS TO EXAMS OR CONTRIBUTION TO GROUP PROJECTS VIA VIDEO CONFERENCE, BEFORE ASSIGNING GRADES.

INDIVIDUAL GRADES FOR GROUP ASSIGNMENTS COULD BE DIFFERENT FROM GROUP GRADE BASED ON TEAM EVALUATIONS

The final letter grade will be calculated based on the following scale:
A: 900 and above; B: 800-899%; C: 700-799 D: 600-699 F: Below 600

Other Class Policies

Attendance and Participation Policy
Attendance and participation are expected since they are part of ACTIVE LEARNING. Attendance may be taken RANDOMLY BY AUDIO/VIDEO/CHAT AND at any point during the class (beginning, middle, and end).

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 VIA CHAT OR ONLINE QUIZZES.

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 may not be copied. Students are encouraged to review their exams during office hours or by appointment. 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. Homework must be submitted according to the deadlines on Canvas. Late homework will not be accepted, and you will receive a zero for that assignment.

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 joining late, disruptive chat messages that are unrelated to the course or, making unnecessary comments that add no value to the class, and any activities that negatively impact the ability of other students to learn and/or listen in class.

LISTENING TO THE CLASS ON A PHONE IS NOT CONDUCIVE TO LEARNING.

LISTENING TO THE CLASS ON A PHONE WHILE DRIVING IS DANGEROUS!

The instructor may randomly call on students to answer questions.
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
It is expected that students will use a laptop or desktop in accordance with the Belk College laptop policy available at https://belkcollege.uncc.edu/laptop-policy

Use of computing, communication, or other devices during the class time for purposes other than those required for the class is prohibited. 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 during
exams and 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 https://ds.uncc.edu/

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

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Assigned Reading</th>
<th>Due Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 21</td>
<td>Introduction and Course Overview</td>
<td>Ch. 1</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Data Models</td>
<td>Ch. 2</td>
<td>Group Formation</td>
</tr>
<tr>
<td>28</td>
<td>Data Models</td>
<td>Ch. 2</td>
<td>Ch. 2 HW, Quiz</td>
</tr>
<tr>
<td>Feb 2</td>
<td>The Relational Database Model</td>
<td>Ch. 2/3</td>
<td>ACADEMIC INTEGRITY QUIZ</td>
</tr>
<tr>
<td>4</td>
<td>The Relational Database Model</td>
<td>Ch. 3</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>ER Modeling</td>
<td>Ch. 3/4</td>
<td>Ch. 3 HW, Quiz</td>
</tr>
<tr>
<td>18</td>
<td>ER Modeling</td>
<td>Ch. 4</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>ER Modeling</td>
<td>Ch. 4</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>ER Modeling/Advanced Data Modeling</td>
<td>Ch. 4/5</td>
<td>Ch.4 Hw,Quiz</td>
</tr>
<tr>
<td>Mar 2</td>
<td>Advanced Data Modeling</td>
<td>Chapter 5</td>
<td></td>
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<tr>
<td>4</td>
<td>EXAM1 (Chapters 1-4)</td>
<td></td>
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</tr>
<tr>
<td>9</td>
<td>Normalization</td>
<td>Ch. 6</td>
<td>Ch. 5 HW Quiz</td>
</tr>
<tr>
<td>11</td>
<td>Normalization</td>
<td>Ch. 6</td>
<td>Assignment 1 (ERD)</td>
</tr>
<tr>
<td>16</td>
<td>Normalization</td>
<td>Ch. 6</td>
<td>Ch. 6 HW, Quiz</td>
</tr>
<tr>
<td>18</td>
<td>Normalization</td>
<td>Ch. 6</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Normalization Assignment and Project</td>
<td></td>
<td>Project Topic &amp; Project Phase 1</td>
</tr>
<tr>
<td>25</td>
<td>Catchup and Review</td>
<td>Ch. 6</td>
<td>Assign. 2 (Normalization) &amp; Peer Evals- Due</td>
</tr>
<tr>
<td>30</td>
<td>Exam 2 (Chapters 5, 6; 9 as bonus)</td>
<td>Ch. 6</td>
<td></td>
</tr>
<tr>
<td>April 1</td>
<td>SQL Lab</td>
<td></td>
<td></td>
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<tr>
<td>6</td>
<td>SQL Lab</td>
<td></td>
<td>Project Phase 2</td>
</tr>
<tr>
<td>8</td>
<td>SQL Lab</td>
<td></td>
<td></td>
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<tr>
<td>13</td>
<td>SQL Lab</td>
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<td>SQL Homework</td>
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<tr>
<td>15</td>
<td>SQL Lab</td>
<td></td>
<td></td>
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<tr>
<td>20</td>
<td>SQL Lab &amp; Review</td>
<td></td>
<td></td>
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<tr>
<td>22</td>
<td>SQL REVIEW</td>
<td></td>
<td>SQL QUIZ</td>
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<tr>
<td>27</td>
<td>Data Warehousing and Big Data</td>
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<tr>
<td>29</td>
<td>SQL EXAM</td>
<td></td>
<td></td>
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<tr>
<td>May 4</td>
<td>PROJECTS</td>
<td></td>
<td>Project version 1 and Presentation due</td>
</tr>
<tr>
<td>TBD</td>
<td>EXAM 4</td>
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</tbody>
</table>

### 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.