

**Computer Science**  
**COURSE NUMBER: 22:198:603**  
**COURSE TITLE: Business Data Management**

**COURSE DESCRIPTION**

The purpose of this course is to provide students with an understanding of database technology and its application in managing data resources. The conceptual, logical, and physical design of databases will be analyzed. A database management system will be used as a vehicle for illustrating some of the concepts discussed in the course.

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**COURSE MATERIALS**

- Textbook(s):

1. BUSINESS DATA MANAGEMENT : 22:198:603:42 (Section 42)  
Database Systems: Design, Implementation, & Management 11th  
Edition by Carlos Coronel (Author), Steven Morris (Author)  
ISBN-13: 978-1285196145

2. Microsoft Access SQL Comprehensive: Pindaro E.  
Demertzoglou ISBN-13: 978-0-9883300-0-9

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**LEARNING GOALS AND OBJECTIVES**

LGO1. Students will learn the tools, techniques, and methods of managing business data

LGO2. Students will learn the tools, techniques, and methods of securing and optimizing business data

LGO3. Students will learn the tools, techniques, and methods of SQL driven database management and implementation

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**PREQUISITES**

Background in a procedurally oriented language or permission of the instructor

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**ACADEMIC INTEGRITY**

*I do NOT tolerate cheating.* Students are responsible for understanding the RU Academic Integrity Policy ([http://academicintegrity.rutgers.edu/files/documents/AI\\_Policy\\_2013.pdf](http://academicintegrity.rutgers.edu/files/documents/AI_Policy_2013.pdf)). I will strongly enforce this Policy and pursue *all* violations. On all examinations and assignments, students must sign the RU Honor Pledge, which states, "On my honor, I have neither received nor given any unauthorized

assistance on this examination or assignment.” [I will screen all written assignments through *SafeAssign* or *Turnitin*, plagiarism detection services that compare the work against a large database of past work.] Don’t let cheating destroy your hard-earned opportunity to learn. See [business.rutgers.edu/ai](http://business.rutgers.edu/ai) for more details.

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## **ATTENDANCE AND PREPARATION POLICY**

- Expect me to attend all in-class sessions. I expect the same of you. If I am to be absent, my department chair or I will send you notice via email and Blackboard as far in advance as possible.
  - For weather emergencies, consult the campus home page. If the campus is open, class will be held.
  - Expect me to arrive on time for each class session. I expect the same of you.
  - Expect me to prepare properly for each class session. I expect the same of you. Complete all background reading and assignments. You cannot learn if you are not prepared. The minimum expectation is that for each class session, you have prepared by studying for at least twice as many hours as the class hours.
  - Expect me to participate fully in each class session. I expect the same of you. Stay focused and involved. You cannot learn if you are not paying attention.
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## **CLASSROOM CONDUCT**

- All cell phones should be turned off
  - Please raise your hand before asking questions
  - Refrain from side conversations, sleeping, and other disruptive behaviors.
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## **EXAM DATES AND POLICIES**

There are 2 exams in this course. All exams are comprehensive. Exam dates are:

Midterm : Thursday October 22.

Final Exam: Date – TBA, comprehensive, in-class, paper based, closed book/notes, calculator allowed, no laptops or PDAs, all cell phones turned off

During in-class exams, the following rules apply:

- If you have a disability that influences testing procedures, provide me an official letter from the Office of Disability Services at the start of the semester.
  - No cell phones or other electronics are allowed in the testing room.
  - You must show a valid Rutgers photo ID to enter the room and to turn in the exam.
  - Alternate seating; do not sit next to another student or in your usual seat.
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## GRADING POLICY

Course grades are determined as follows:

Homework	30%
Midterm	30%
Final	40%

- Extra credit: None

- Grade distribution:

**Letter**                      **Percentage**

A	90-100
B+	87-89.99
B	80-86.99
C+	77-79.99
C	70-76.99
D+	67-69.99
D	60-66.99
F	<60

1. **Grades will not be rounded up or down** – they are calculated and recorded to the one hundredth place automatically and are used in that form to assign midterm and final grades. There will be no “curve”.
2. **All** examinations and quizzes, including the Final Examination, **should be considered cumulative.**
3. **COURSE GRADE WILL BE ISSUED WHEN ALL COURSE REQUIREMENTS ARE MET.**

- Grade posting: Grades will be provided within a week of an exam, assignment/paper submission, or quiz. Grades on hardcopy items will be provided in person in the class when the specific items are returned. For online/Blackboard items, grades will be posted in the Blackboard.

- Return of graded items: Graded items will be returned within two weeks in person for hardcopy items and via Blackboard for online items. **Final exam, and final project reports will not be returned.**

**Blackboard for this course will be turned off and archived at the end of the final exam.**

-Grade related information: No grade related information will be provided through email. All grade related information will be provided in-person via appointments. It is expected that you are respectful when you review your grade with me and accept the grade you have earned. Please do not use abusive language in email or in person. Any instances of that will be reported according to university guidelines.

- Warning grade roster: Warning grades will be issued if needed. You must watch for warning grades.

- Pregrading & regrading: Requests to review assignments before final submission (pregrading) will

be provided by appointment and primarily after class hours. Requests to regrade assignments, Quizzes, & exams must be done in writing to the instructor within one week of the specific items being returned.

Regraded items will be delivered back to students in person during after class hours.

- Grade grubbing: Your final grade is not subject to negotiation. If you feel I have made an error, submit your written argument to me within one week of receiving your grade of the specific item. If you want me to review the final grade, submit your written argument to me within one week of receiving your final grade. Clarify the precise error I made and provide all due supporting documentation. If I have made an error, I will gladly correct it. But I will adjust grades only if I have made an error. I cannot and will not adjust grades based on consequences, such as hurt pride, lost scholarships, lost tuition reimbursement, lost job opportunities, or dismissals. Do not ask me to do so. It is dishonest to attempt to influence faculty in an effort to obtain a grade that you did not earn, and it will not work.

### **COURSE SCHEDULE** (Tentative schedule, Subject to Change)

Week of	Topic	Deliverable
Sep 3	Overview of course logistics Intro to Business Data Management	
Sep 10	ERFP Demo – Database implementation	
Sep 17	Database Systems Chapter 1 SQL Lab	
Sep 24	Data Models – Chapter 2 SQL Lab	
Oct 1	Relational Database Models – Chapter 3 SQL Lab	<b>Homework Assignment #1</b>
Oct 8	Entity Relationship Modeling – Chapter 4 SQL Lab	
Oct 15	Advanced Data Modeling - Chapter 5 SQL Lab	
Oct 22	<b>Midterm</b> Normalization of Database Tables – Chapter 6	<b>Midterm</b>
Oct 29	Normalization of Database Tables – Chapter 6 SQL Lab	<b>Homework Assignment #2</b>
Nov 5	Database Design – Chapter 9 SQL Lab	
Nov 12	Transaction Management and Concurrency Control – Chapter 10 SQL Lab	<b>Homework Assignment #3</b>
Nov 19	Database Performance Tuning and Query Optimization – Chapter 11 SQL Lab	
Nov 26	Thanksgiving Holiday	
Dec 3	Distributed Database Management Systems – Chapter 12 Business Intelligence and Data Warehouse – Chapter 13 SQL Lab	<b>Homework Assignment #4</b>

Dec 11	Database Connectivity with Web - Chapter 14 Database Administration and Security – Chapter 15 SQL Lab	
Dec 15	<b>Final Exam Week</b>	<b>Final Exam</b>

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## SUPPORT SERVICES

If you need accommodation for a *disability*, obtain a Letter of Accommodation from the Office of Disability Services. The Office of Disability Services at Rutgers, The State University of New Jersey, provides student-centered and student-inclusive programming in compliance with the Americans with Disabilities Act of 1990, the Americans with Disabilities Act Amendments of 2008, Section 504 of the Rehabilitation Act of 1973, Section 508 of the Rehabilitation Act of 1998, and the New Jersey Law Against Discrimination.

<https://ods.rutgers.edu>

If you are a military *veteran* or are on active military duty, you can obtain support through the Office of Veteran and Military Programs and Services. <http://veterans.rutgers.edu/>

If you are in need of *mental health* services, please use our readily available services.

Rutgers Counseling and Psychological Services – New Brunswick: <http://rhscaps.rutgers.edu/>

If you are in need of *physical health* services, please use our readily available services.

Rutgers Health Services – New Brunswick: <http://health.rutgers.edu/>

If you are in need of *legal* services, please use our readily available services: <http://rusls.rutgers.edu/>

If you are in need of additional *academic assistance*, please use our readily available services.

Rutgers University-New Brunswick Learning Center: <https://rlc.rutgers.edu/>

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