Metropolitan State University
ICS 311—Database Management Systems
4 Credits
Course Modality: Online
Summer 2023 – Section 50

Class Dates:	Thursdays 6:00 pm – 9:50 pm May 18th – August 3rd 2023
Instructor:	Christopher Amouzou
E-mail:	Christopher.Amouzou@metrostate.edu
Phone:	612-275-8845
Department:	Computer Science and Cyber Security
Mailing address	Metropolitan State University 700 7th Street East Saint Paul, MN 55106-5000

Last date to drop with full refund: 5/19/2023

1) Course Description:

The course covers concepts and methods in the definition, creation, and management of databases. Emphasis is placed on usage of appropriate methods and tools to design and implement databases to meet identified business needs. Topics include conceptual, logical, and physical database design theories and techniques, such as use of Entity Relationship diagrams, query tools and SQL; responsibilities of data and database administrators; database integrity, security, and privacy; and current and emerging trends. Use of database management systems such as MySQL Overlap: ICS 311T Database Management Systems.

2) Learning Outcomes:

The course is designed such that at the end of the semester, the student will be able to:

- Create SQL databases and populate and maintain/use data in the database (using INSERT, UPDATE, DELETE and SELECT commands).
- Gather requirements and create conceptual, logical, and physical Entity Relationship Diagrams based on requirements.
- Create data warehouses for mining and information retrieval.
- Design for transaction management, concurrency control, and recovery.
- Create indexes and estimate mass storage sizes.
- Design accurate database schemas by applying normalization techniques.
- Relate database query language constructs to relational algebra and relational calculus operators.
- Take advantage of query optimization alternatives.

3) Text Supplementary Readings.

Database System Concepts, Seven Edition.
Abraham Silberschatz, Henry F. Korth, and S. Sudarshan
McGraw-Hill, ISBN 978-0-07-352332-3

4) Learning Methods:

This course uses a variety of assignments to measure student outcomes.

D2L: This course uses D2L to post assignments, to make announcements, or to distribute other class materials; so, you need to check D2L often. You can access D2L through your Net direct portal, or you can directly login to D2L using the following link https://metrostate.ims.mnscu.edu.

5) Course Activities

Below are the activities associated with the course:

Class Quizzes

There will be a total of 15 class quizzes. These quizzes will cover either the previous or the day lecture depending on the circumstances. They will be administered either in the middle or at the end of the class. The main goal of these Class Quizzes is to help you learn the material. These quizzes are also used in computing your course grade. I will drop the lowest 5 of your grades. They contain questions that you need to answer in group settings of about 2 or 3 students or individually if you prefer. Normal duration of a class exercise will be 20 minutes.

Homework Problem Sets

There are 4 homework assignments. These should be done individually. The assignments are designed to help you review concepts that are covered during class. Some homework assignments include exercises to be done on MySQL Database Management System. They also define the scope of the topics that you should master while preparing for the exams. Homework Assignments should be uploaded to D2L by the due date.

Class group discussions using zoom breakout rooms.

Each week there will be topics related to the material been considered that will be discussed in class. I will participate in these discussions at times as I help you understand the material. These discussions will happen in group settings. Participation from each member of the team is encouraged. The goal is to discuss your ideas on the subjects and come to a better understanding of them. Six of these discussions will be graded and counted toward your final grade. The zoom breakout rooms will be created randomly each week to allow you the opportunity to work with many of your peers. Answers to these topics will be posted on D2L.

Course Project:

The course workload includes a semester-long project. The project will be done in groups of two students. Your group should communicate with you on the first day of class. The project will cover the major steps of database design/development and is to be done on MySQL. The project's work is divided into three steps and each step depends on the completion of the previous steps.

Exams:

There are two midterm exams and a final exam. I will take the better of the two midterm exams. All exams will be taken in class, unless otherwise noted. The exam dates are specified in the schedule. The final exam is on the last day of the class.

Time Requirements:

This course will involve reading assignments, problem sets, and project assignments. The amount of time required to prepare for the class each week will vary from individual to individual. It takes time to complete the required reading assignments, problem sets, and especially the project. In addition, you will need to study for the tests. Some people estimate that it may take 3 hours of preparation outside of class for each hour spent in class. Therefore, you need to be prepared to spend at least that amount of time each week, and it may take more time than that.

6) Deliverables and Grading

Assignment and Grading

Points are allocated to different learning activities as indicated below.

Items	Number of Items	Maximum Points per Item	Total Maximum Possible Points
In Class Quizzes	Best 10 of 15	10	100
Homework	4	40 x2 + 30 + 25	135
Projects	3	30 + 60 + 50	140
Group Discussion Items	6	10	60

Mid-terms	Best one of 2	75	75
Final Exam	1	120	120
Class Attendance		15	15
Total			645

Grade Guidelines
- **Letter Grade:** Your letter grade will be determined based on the total points that you earn during the semester. The following table relates the percentage of the maximum possible points to a letter grade:

Percentage	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-
60 - 69	D
Below 60 %	F

If you have selected the S/N grading option, then to receive a satisfactory rating (S) you must earn at least a C-. If you wish to elect S/N grading, you must inform the registrar before the second-class meeting.

A grade of incomplete may be considered if the person requesting has successfully completed most of the class and is a student in good standing in the class. "Good standing" means that the requester is earning a minimum of a C grade and has attended class regularly. I reserve the right to say no to any request for an incomplete without justifying my position.

Class Attendance:
Metropolitan State University policy requires that we take class attendance the first two weeks of class. After that, I expect everyone to attend each class. There will be a zoom breakout rom discussion every week.

Progress:
Throughout the semester, we will discuss your progress in the class and see if there is any help I can provide. I hate surprises at the end of the semester.

Absences:
If you miss a class, email, or talk to me as soon as possible and be sure to get notes from one of your classmates. Since there will be group meetings in the zoom breakout room to discuss your project, it will be beneficial to inform your group members about your absence. Lecture notes and other class materials will also be available via D2L. Although I will be able to answer questions, I will not give recap sessions for those who miss class. In case of a stressful work or home situation that affects your ability to perform well, please talk to me as soon as possible. *I do understand the stress we all go through in our day-to-day lives*. I recommend that you exchange phone numbers with someone else in the class at the first break.

7) **Schedule and Topics and Due Dates**

See the end of the Syllabus for the course schedule and due dates.

8) **Late Policies for Assignments**

All assignments must be submitted prior to midnight of the date due. Up to one day late will be discounted 10%. Up to two days late 20%. Up to three days late, 30%. Submittals later than 3 days overdue will receive a grade of zero unless you have received prior written approval from the instructor to submit the work under a different deadline. Reasons for different deadlines includes duty days for military service personnel, travelling out of the United States, illness, and/or a disability accommodation (See Disability Services section below).

9) **Incomplete for Course**

If you choose to seek an incomplete grade in this course, you must provide a written request through campus email to the instructor at least 7 days prior to the end date of the term. The instructor has the right to refuse granting a grade of incompletes for students who have not sustained a passing grade in the course up and to the date of the student's written request for an incomplete.

10) **Academic Integrity**

The University does not accept knowingly copying the work of others without attribution (plagiarism), or colluding with other students to share answers unless permitted by the instructor (e.g. group project).

You should be aware that the university subscribes to plagiarism detection software, and that your papers may be selected for plagiarism checking. In instances of plagiarism or other forms of academic dishonesty, instructors may impose academic sanctions. Allegations of plagiarism or other forms of academic dishonesty are also subject to investigation and additional conduct sanctions under the Student Academic Integrity Policy #2190, and Procedure #219: Student Academic Integrity.

If you have questions about the use of footnotes or other notations, talk to your instructor, consult the Library and Information Services website, or seek assistance in the proper way of writing a paper by contacting a tutor in the Center for Academic Excellence. Students who believe that they have been falsely accused of plagiarism should request assistance from the Ombudsperson at (651) 793-1517.

11) **Plagiarism and Copyright**

Plagiarism is defined as the act of claiming another person's work as one's own. This can be copying or copying even parts of sentences from an article, journal, internet site, another student's work, or other written work.   It can also mean using another student's assignment and making minor changes. Changing a few words around in content is still plagiarism.

Sometimes students are not sure if they are committing plagiarism. Please consult the instructor regarding more information on plagiarism and how to avoid it.   The instructor reserves the right to assess through http://www.turnitin.com/ and/or asking for resources used. Student are encouraged to consult the Metropolitan State University Writing Lab and resources for assistance as well.

If a student is found to have plagiarized work, even if accidentally, the student will be provided a one-time opportunity to redo the assignment. The opportunity to redo the assignment will only be provided one time in the course. Points will be reduced on the revised submission by up to ½ (50%) of the total earned.

The instructor reserves the right to not grant the opportunity to revise and resubmit the assignment. This decision will depend upon the student's overall progress in the course and adherence to course and assignment standards.

Future work that is found to be plagiarized will be given a grade of zero (0). The instructor will notify the student in the feedback for the assignment if work is found to have been plagiarized.

If plagiarism occurs repeatedly (even one more time) course failure will result. This policy is consistent with Metropolitan State University Student Handbook and University Procedures.

As part of academic honesty, students are expected to respect intellectual property laws, including copyright law. No parts of this site, your textbook, other publisher materials, or contribution from other class members can be used or distributed outside of this class without the permission of the author(s). Copyright law provides that any creative thought fixed into tangible form is copyrighted the moment it is created, whether a copyright notice is affixed.

Please review this excellent article on plagiarism to learn more. Parts of the article are posted below: https://www.plagiarism.org/article/what-is-plagiarism

Acts of plagiarism may be reported to the Associate Provost for Student Success.

12) **What you can expect from me**

You should expect from me to show up on Zoom and teach the class as scheduled. Please notice that there are situations beyond my control (illness for example) that may result in my failing to show up late or not come to class at all. I will send out email to you all in such a situation. Moreover, I should treat you with respect. I may not honor all of your requests, but I will listen to what you have to say. I will do my work to the best of my ability and grade your work and give you feedback in a reasonably prompt manner.

13) **What I expect from you**

I expect that you log to class regularly. Obviously, factors that prevent me from showing up may prevent you from coming as well. You are responsible for everything we cover in class whether you were in class or absent. Ensure that you have the prerequisites for

taking the class. Treat assignments seriously. Seek help (talk to or email me) if you are having difficulty with your course work. Remember that it is OK to ask for help. Mastering new things can be an intensely frustrating experience unless you learn when to ask for help. In general, if you spend more than 15 minutes absolutely stuck on a problem, you should ask someone else to give you a hint. However, you should never copy someone else's solution. If you do not understand why you received a grade, I expect you to approach me and ask questions. I expect you to treat me with respect even if you disagree with the grade you were assigned. I also expect you to be respectful of your classmates.

14) Expectation for Respectful discussion

All students are encouraged to critically reflect on the course topics and to raise questions to the class and to the professor. Please be respectful to one another by not presenting your question in a hostile manner. Open dialogue on course content is encouraged, but attacks on classmates or me are not. Please set up a time to talk with me if you have questions about this policy or if you believe this policy is being violated. You may also report hostile or threatening behavior and information about filing a complaint or report can be found here: https://www.metrostate.edu/students/support/student-concerns-complaints.

There are many offices on campus that provide additional support and/or information outside of class including:

- Black, African, and African American Support Services: https://www.metrostate.edu/students/support/african-and-african-american-student-services

- American Indian Student Services: https://www.metrostate.edu/students/support/american-indian-student-services

- Asian American Student Services: https://www.metrostate.edu/students/support/asian-american-student-services

- Latinx and Undocumented Students Support Services: https://www.metrostate.edu/students/support/latinx-undocumented-services

- LGBTQ Student Services: https://www.metrostate.edu/students/support/glbtq

- Veteran Services: https://www.metrostate.edu/students/support/veterans

- Women's Support Services: https://www.metrostate.edu/students/support/women

- International Student Services: https://www.metrostate.edu/students/support/international

- Multicultural, American Indian, and Retention Services: https://www.metrostate.edu/students/support/culturally-responsive-support

15) University Academic Policies and Information

University Non-Attendance Verification and Reporting Policy and Procedure

The purpose of the Non-Attendance and Reporting Policy is to ensure Federal Title IV regulations are adhered to with respect to a student's enrollment level for the purpose of calculating and paying financial aid. While Metropolitan State University is not required to take attendance, Federal Title IV financial aid regulations require a procedure to establish that students have attended, at a minimum, one day of class for each course in which the student's enrollment status was used to determine eligibility for the Pell Grant Program. In addition, the university needs to determine a last date of attendance for those students who receive all failing grades or unofficially withdraw. Attendance is defined based on course delivery mode. A student is "in attendance" if he or she meets the following conditions before the end of the second week of the course:

- Classroom Courses –the student is present in the classroom.
- Web-Enhanced (Reduced Seat Time Courses) –the student is present in the classroom or submits at least one academically relevant assignment.
- Online Courses –the student submits at least one academically relevant assignment.
- Independent Studies – the student contacts the instructor or submits at least one academically relevant assignment

If a student does not attend the first two classes, either live and/or online, that student is automatically dropped from the course. If a student adds the course past the drop/add date, he/she will not receive points for any assignments, discussions, quizzes, or exams for which the due date has already occurred.

Refer to the Non-Attendance and Reporting Policy 2259, and the Non-Attendance and Reporting Procedure 259.

16) Diversity and Disability Statement

Our institution values diversity and inclusion; we are committed to a climate of mutual respect and full participation. Our goal is to create learning environments that are usable, equitable, inclusive, and welcoming. If there are aspects of the instruction or design of this course that result in barriers to your inclusion or accurate assessment or achievement, please notify the instructor as soon as

possible. Students with disabilities are also welcomed to contact the Center for Accessibility Resources to discuss a range of options to removing barriers in the course, including accommodations.

Phone: 651-793-1549
Web: <u>Center for Accessibility Resources</u>

The University provides access to its programs and services by making reasonable accommodations for qualified students. Accommodations may include approval for early registration, note-takers,   interpreters for the deaf, adaptive equipment, and testing arrangements.

17) Student Code of Conduct
Students at Metropolitan State University deserve the opportunity to pursue an education, and it is the responsibility of the university to provide an environment that promotes learning and protects the safety and well-being of the university community. Therefore, the university establishes this Student Conduct Code. Any action by a student that interferes with the education of any other student or interferes with the operations of the university in carrying out its responsibility to provide an education will be considered a violation of this code.

The Student Code of Conduct balances individual student due process rights with the broader interests of the safety, wellbeing, and academic integrity of the university community. The Dean of Students Office administers the student conduct process at Metropolitan State University. It operates with the philosophy of balancing the need for student accountability with the opportunity for education and making amends.   Students are encouraged to review the <u>Student Conduct Code University Policy #1020</u> and the <u>Student Conduct Code Procedure #112</u> to understand their rights and responsibilities under the Code.

If you are aware of a potential student conduct violation, you may report it <u>HERE</u>. If you are not certain and would like to inquire about whether something falls under the Student Code of Conduct, please email <u>dean.students@metrostate.edu</u>.

18) Sexual Violence, Sexual Harassment, and other Gender Related Discrimination Concerns
If you believe you have experienced sexual misconduct, harassment, or violence and would like the university to formally investigate the situation, you may submit a formal complaint. These complaints can be student to student, employee to student, employee to employee, and non-students or non-employees.
Information about student(s) involved or investigation itself are confidential and protected under Family Educational Rights and Privacy Act (FERPA). However, information about instances of sexual misconduct must be shared among university staff whose are investigating the situation and responsibilities for rendering a decision.

Students who have experienced or observed related issues may submit a report **<u>HERE</u>**. If you are certain if something falls within this category, you may email <u>dean.students@metrostate.edu</u> . Additionally, the Dean of Students and other related offices provide training and education on these important

19) Emails
Metropolitan State University has designated e-mail as an official method of communication with students. **The university expects** students to be responsible for all information sent to them via their official university email account. Refer to <u>Policy 1050, University E-mail</u>, for further information.
When sending me email, please use ICS_311-51 on the subject line.

20) Academic Appeals
The university has written procedures for appealing decisions concerning grades. You should first attempt to resolve an appeal issue informally with the instructor. To file a formal appeal, you must begin the formal appeal process within 60 calendar days of the posting of the grade or evaluation. A staff member in Student Affairs serves as ombudsperson to work with students in preparing formal appeals. For details, refer to <u>Procedure 202, Academic Appeal Procedure</u>.

21) Technology Requirement and Expectations
Technical Assistance
IT Helpdesk (<u>it.desk@metrostate.edu</u>; 651-793-1240) provides general computer assistance.

Center for Online Learning (<u>online.learning@metrostate.edu</u>; 651-793-1650) provides general assistance with online learning and course access. Please include your tech id number and course name and number.

Computer Hardware and Software
For this course, your computer must fully pass the System Check found on the <u>D2L login page</u>.

Students must have internet access to log into the D2L system multiple times per week in order to check for updates and complete required work. Your skills should include the ability to add browser plug-ins for viewing files and content presented within the course or be able to get such assistance from non-campus sources at your own expense.

22) File Management

Intermediate or higher-level skills at file management (ability to create folders, move and rename folders and files, identify type of file by its file-extension, attach files to emails, etc.)

23) Anti- Virus Software

Updated virus scanning software for all files sent and received (such as McAfee Antivirus, Norton Internet Security, etc.) is required.

24) Computer Software

Computer skills include proficiency with using a web browser and in using the Internet to access online resources and sites as well as competence at using Microsoft Office products such as Word and Power Point.

25) Technical Assistance

IT Helpdesk (it.desk@metrostate.edu; 651-793-1240) provides general computer assistance.

Center for Online Learning (online.learning@metrostate.edu; 651-793-1650) provides general assistance with online learning and course access. Please include your tech id number and course name and number.

26) Accessibility Resources

Phone: 651-793-1549
Web: Center for Accessibility Resources

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27) Trio Student Support Services

Support for first-generation students, low-income students and students with disabilities. They can be reached at trio.center@metrostate.edu or 651-793-1525.

28) Center for Academic Excellence- Tutoring and Testing Center

Phone: 651-793-1461
Web: Center for Academic Excellence
Email: centerfolk@metrostate.edu

Our tutoring mission: to help students learn. We strive to role-model resourcefulness, active learning, and collaborative problem-solving, such that students build self-confidence and efficacy as independent life-long learners. Our professional and peer tutors help students navigate conceptual difficulties and develop study skills. Our tutors are devoted to helping currently enrolled students achieve their academic goals in one-to-one and small group tutorials.
Students are encouraged to contact the Center for Academic Excellence first for their tutoring needs. Metro State students also can access tutoring through tutor.com which is provided through Minnesota State (each student can get 15 hours of tutoring from tutor.com).

To access this service:
- Sign into D2L
- At the very top there is a menu bar: click on Tutor.com
- You can work with a tutor immediately or schedule a session
- Under Topic: select [Subject].
- Under Subject: select the relevant level or course topic

29) Collegial Recovery Program

Phone: 651-793-1579 (Dean of Student's Office)
Web: Collegiate Recovery Program

Metropolitan State University's Collegiate Recovery Program provides support and resources for students who have challenges with substance use or other behavioral addictions. We also support students working toward long-term recovery to increase overall well-being and meet educational, professional and personal goals. For general information or questions, you may email at Collegiate.Recovery@metrostate.edu.

30) Counseling Services

Phone: 651-793-1568

Web: [Counseling Services](#)

College students often experience issues that may interfere with academic success, such as academic stress, sleep problems, balancing multiple responsibilities, life events, relationship difficulties, discrimination / oppression, or feelings of anxiety, hopelessness, or depression. If you are a friend is struggling, we encourage you to seek support. Helpful, effective, and culturally responsive services are available on campus free of charge.

For immediate help during or after hours, on weekends and holidays, contact Counseling Services at 651-793-1568 and choose option zero to access the Metro CARES support line. Counseling Services is providing telehealth services to students during the COVID-19 pandemic. To schedule an appointment with our staff counselors, call 651-793-1568 during business hours.

31) International Student Services
Phone: 651-793-1616
Web: [Library and Information Services](#)
Email: library.services@metrostate.edu

The Library and Learning Center on the Saint Paul campus offers a full array of library resources, services, computers, and study spaces for the Metropolitan State University community. Librarians are available to assist you in finding information on virtually any topic. They can also guide you in evaluating scholarly and other resources for your coursework and research. Assistance is available by phone (651-7983-1614), email (library.services@metrostate.edu), or chat and Zoom from the library's homepage. Through this homepage you can access more than 100 research databases and thousands of ejournals, streaming videos, and ebooks.

32) Multicultural, American Indian and Retention Services
Phone: 651-793-1543
Web: [Multicultural Success Services](#)

Founder's Hall, St. Paul Campus

MAIR promotes the academic success of historically underrepresented incoming, current, and graduating students by providing retention programming and a wide range of services that includes advocacy and educational planning. MAIR department comprises of the following student services: American Indian, Indigenous, Asian, Asian American and Native Pacific Islander, Black, African, and African American, Latinx and Undocumented, Veterans and Military Student Services Center, and Women's & LGBTQ+ Student Services and Resources. MAIR Success Coordinators provide coaching, educational and belonging services: holistic individual success plans, cultural events that highlight Metropolitan State University's diversity, equity and inclusion, special brave/courageous spaces for student groups: Native Circle, Women's and LGBTQ+ Student Resource Center, and Veterans and Military Student Services Center. Also, Success Coordinators advise student clubs and organizations such as Black Student Union, Hmong Student Organization, Lavender Bridge, Metropolitan State University's Veterans Network, Pueblo, and Voices of Indian Council for Educational Success (VOICES). Success Coordinators provide support to empower students and promote successful college transitions and graduation.

33) Student Parent and Resource Center
Phone: 651-793-1564
Web: [Student Parent & Resource Center](#)
St. John's Hall, L.14; St. Paul Campus

The Student Parent Center is in St. John's Hall L14 and provides a child-friendly study space (visit our website for updates regarding availability of the space). The center seeks to provide support and connect currently enrolled students and their families with campus and community resources to ease obstacles that may be interfering with their education. Students can schedule a phone or Zoom appointment to meet with the coordinator here: https://calendly.com/studentparentresourcecoordinator/60min

34) Food for Thought Food Pantry
Phone: 651- 793-1571
Web: [Food for Thought Food Pantry](#)
St. John's Hall, L.10; St. Paul Campus

The Food for Thought Food Pantry is a collaborative initiative between Metropolitan State University and our community partners Good in the Hood and Every Meal. Students seeking additional support with subsidizing their food budget can schedule an appointment to pick-up free prepackaged food boxes and bags from the library. Please visit our website for changes and updates regarding the operations of the pantry. Schedule an appointment to pick-up food here: https://calendly.com/foodforthoughtpantry/food-for-thought-food-pantry-pick-up.

35) Veterans and Military Student Services
Phone: 651-793-1561

Web: [Veteran Services](#)
Founder's Hall 201, St. Paul Campus

We assist all who have served or are currently serving in any branch of the United States Armed Forces. Veterans Services will advocate on your behalf. We provide help with understanding admissions requirements and academic programs, getting college credits for your military training, accessing federal and state educational and financial benefits, and VA certification of your registered courses. Thank you for your dedication, sacrifice, and service to our country.

36) Women's and LGBTQ + Student Services and Resources
Phone: 651-793-1544
[Web: Women's and LGBTQ+](#)
[Founder's Hall, Room 140, St. Paul Campus](#)

Women's and LGBTQ Student Services fosters a safer and more inclusive campus by providing support, resources, leadership development, and education related to diverse sexual orientations and gender identities. Metropolitan State University supports a large contingent of LGBTQ+ students and there are multiple services and resources available. To help foster a safer and more inclusive campus, the center has confidential resources and information available for those who experience discrimination based on sex, gender identity, or sexual orientation

37) Zoom
As part of being a student within the Minnesota State Colleges and Universities System, you have access to a premium license of the web conferencing tool: Zoom. Due to recent events your instructors will likely be using this more frequently to host class sessions online, but you can also personally use it for meetings with your classmates!

You can access your MinnState Zoom account from: https://minnstate.zoom.us/, just click the "Sign on" button and login with your StarID and password.

Visit the following link to learn more about connecting to a Zoom conference: https://services.metrostate.edu/TDClient/1839/Portal/KB/ArticleDet?ID=101232

Visit the following link to learn more about hosting a Zoom conference for presenting or teaching: https://services.metrostate.edu/TDClient/1839/Portal/KB/ArticleDet?ID=100273

If you get stuck or need some extra help, you can reach out to our Information Technology Services or the Center for Online Learning.

Also, the [Zoom Help Center](#) has many great resources, live trainings, and even fantastic technical support representatives waiting to help you if need-be.

ICS 311-50 – Summer 2023 Schedule

Date (Lecture)	Topic(s)	Required Reading, Due Dates, and Exams
5/18/23(1)	Syllabus: Introduction to Database Management Systems	Read Syllabus Read Chapter 1 Homework 4 out Project Step 1out
5/25/23 (2)	Introductions to the Relational Model Introduction to SQL	Read Chapter 2 and Chap3 Part 1 Homework 1 out
6/1/23 (3)	SQL Part 2	Read Chapter 3 – Part 2
6/8/23 (4)	Examples on SQL Aggregate and Group By queries Intermediate SQL	Homework 1 due Project Step 1 due Homework 2 out Project Step 2 out Read Chapter –Part 3 Read Chapter 4
6/15/23 (5)	Exam 1 Database Design and the relational Model	Read Chapter 4 Read Chapter 7
6/22/23 (6)	Database Design and the relational Model	Homework 2 due Homework 3 out
6/29/23 (7)	Examples on Database Design	Finish Reading Chapter 6 Project – Step 2 due Project - Step 3 out
7/6/23 (8)	Normalization Advanced SQL (Triggers)	Read Chapter 7 Homework 3 due
7/13/23 (9)	Exam 2 Advanced SQL (Procedures) Transaction Management	Read Chapter 5 Read Chapter 17
7/20/23 (10)	Concurrency Control Recovery System	Read Chapter 18- Part1 Read Chapter 19- Part1
7/27/23 (11)	Class Presentations Indexing Review for Final	Homework 4 due Project Step 3 due
8/3/23 (12)	Final Exam	Final Exam