

School of Business

MSBA 504: Database Management Fall 2020

TTH 12:20 - 2:30 PM

Instructor: Dr. Carl M. Rebman, Jr.

Office: Coronado 212

Office Hours: TTH 5:20 PM - 6:20 PM

W 2:30 PM - 5:30 PM

Other times by appointment.

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Course Description:

Humans produce a LOT of data - according to the World Economic Forum, we crossed 4 Zettabytes (1 trillion Gigabytes) of data worldwide in 2014, and now expected to reach 44 Zettabytes in 2020. That data is used for a wide range of useful things - health care, web search, maps, weather simulation, scientific research, etc. The massive volume of data being produced and consumed for these purposes has made Big Data a very hot topic these days, and NYU even has its own Data Science Institute.

A majority of business data are stored in traditional data systems, such as relational databases. While other data sources, e.g., social media, messaging data, and machine sensors, are also increasing in importance, the data stored in traditional data systems are often of central importance in business analytics projects. To access and analyze these data, business analytics professionals need knowledge of relational databases and SQL. Consequently, SQL and relational database skills are two of the most sought-after skills by recruiters that hire business analytics professionals (Mamonov et al. 2015; Wixom et al. 2014).

Database systems are tools we can use to store and manipulate all that data for useful ends. This course will provide students with an introduction to relational databases concepts, data warehousing, and Structure Query Language (SQL). Teaching methods include class lecture, case studies, and Internet laboratory research projects.

Course Objectives and Expected Outcomes:

At the end of the course, you should be able to:

- 1. Design a database
- 2. Manipulate dataset with Structured Query Language (SQL)
- 3. Apply SQL to the solution of selected problems
- 4. Apply the concept of data modeling using Entity-Relationship model to selected databases
- 5. Optimize data structures and tables that eliminate duplication, unnecessary data entry, and confusion.
- 6. Merge, analyze and query databases to produce new information
- 7. Apply the database concepts to solve selected operational problems

Course Texts and Materials:

Concepts of Database Management, 10th Ed. Lisa Friedrichsen; Lisa Ruffolo; Ellen Monk; Joy L. Starks; Philip J. Pratt; Mary Z. Last ISBN-10: 0-357-42208-2 ISBN-13: 978-0-357-42208-3

Additional readings and materials may also be assigned on a periodic basis.

Course Requirements and Student Evaluation:

1. Assignments (25%):

You will receive assignments to be completed individually. There will be both in-class exercises and homework will be varying point values.

Late assignments will receive a 10% deduction in points each day it is late. Any assignment past 5 days will receive no points. There are NO makeups for in-class assignments.

2. Exams (40%):

There will be two exams. They will be worth 50% of your course grade. Contents from lectures, readings, assignments, and class discussions are covered on the exams.

3. Project (25%):

During the course you will develop a project that demonstrates your ability to:

- Design a functional, database that addresses specific business needs
- Write SQL commands to merge, sort and perform other operations to accomplish address specific tasks
- Present and demonstrate your model to the class

You will be provided with more information throughout the term

Evaluation

Exam One Exam Two	200 200
Project	250
Attendance/Participation/Professionalism	100
Total	1000

Academic Integrity:

You, your colleagues, faculty, staff, and alumni are the University of San Diego. These and many other persons have worked very hard since the founding of USD in 1949 to build a quality university. The philosophy and mission of USD http://www.sandiego.edu/about/mission-vision-values.php emphasizes the idea of personal and academic integrity. The following is a synopsis of the academic integrity policy. For more information click on this hyperlink http://www.sandiego.edu/associated-students/branches/vice-president/honor-council/integrity-policy.php or download this pdf http://www.sandiego.edu/conduct/documents/HonorCode.pdf

"All members of the University community share the responsibility for maintaining an environment of academic integrity since academic dishonesty is a threat to the University. Acts of academic dishonesty include: a) unauthorized assistance on an examination; b) falsification or invention of data; c) unauthorized collaboration on an academic exercise; d) plagiarism; e) misappropriation of resource materials; f) any unauthorized access of an instructor's files or computer account; or g) any other serious violation of academic integrity as established by the instructor."

Academic Dishonesty will not be tolerated in any form. Helping each other study is anticipated. However, only original work will be accepted. There will be no sharing of materials, wearing hats, or using cell phones/PDAs during tests. All assignments unless otherwise noted are individual assignments. If an incident of academic dishonesty occurs in this course the student could receive a grade of "F" for the semester and could possibly face further disciplinary action.

Student Disability Policy

The University of San Diego complies with the American with Disabilities Act and Section 504 of the Rehabilitation Act It is a University of San Diego Disability Services policy that when students are scheduling exams (midterm exams or final exams) in the Disability office, they must submit an "Authorization to Administer Exam" at least one week prior to the exam date. If a student does not give Disability office this notice, the Disability office can deny them the right to the accommodation, as the Disability office is not given adequate time to prepare (and set up office space during established exam scheduling times.) Please provide me (your instructor) with a Letter of Accommodation drafted by the Disability office as soon as possible. There are no retroactive accommodations for Disabled students. As your instructor, I am not obligated to provide accommodations until I receive the Letter of Accommodation drafted by the Disability office. If a student does not give the Letter of Accommodation to me (your instructor), within adequate time to make exam arrangements, I am not obligated to fulfill any such request. If you have any questions or concerns about the process please contact, the USD Disability Services office (Serra Hall, Rm 300), phone at 619-260-4655 or via email at disabilityservices@sandiego.edu as soon as possible.

Communication Policy E-Mail

Due to the subject matter of this course it is very important that every student obtain an email account either from the University or from a private provider of the student's selection as various assignments will be need to submitted via email. In addition, course

announcements may be distributed via electronic format. It is the student's responsibility to check their email account on a regular basis (outside of class) during the duration of the course. It is recommended that students should retain a copy of all email correspondence with the instructor until the end of the semester. *Unless otherwise directed no email should be sent to the instructor during class sessions.*

EMAIL MESSAGE FORMAT: To ensure that I respond to your email quickly, please use this as the **SUBJECT LINE** when sending an email to me: **MSBA 504** (followed by subject description)

Attendance/Absence/Participation/Professionalism:

Attendance is critical for success in this class. Although attendance is neither recorded nor explicitly used to determine your final grade (unless you miss more than 50% of class sessions), you will find it much easier to keep up and master the material if you attend regularly. You are responsible for all material covered in class or assigned during a class even if you were absent. Please contact me as soon as possible if you know you must miss a class.

Each student is also expected to provide a contribution through class discussions and group projects. Lastly, professionalism is also taken very seriously. It is very important that proper attention/respect be given towards instructor/guest lectures and student presentations and contributions.

Teaching Method

The student is expected to have read materials or completed assignments as listed on the course schedule prior to each class. The class discussions/lectures are intended to illustrate the primary concepts from each section and to provide an opportunity to answer any questions that may result from the readings.

Grading

Scale	Total Points
A+	>97 %
Α	93 % - 96%
A-	90 % - 92%
B+	87% - 89%
В	83% - 86%
B-	80 % - 82%
C+	77% - 79%
С	73% - 76%
C-	70% - 72%
D+	67% - 69%
D	63% - 66%
D-	60% - 62%
F	59% and below

IMPORTANT DATES

Tuesday 15 September 2020 Friday 2 October 2020 Tuesday 6 October 2020 Exam One Final Presentations (9 to 1 PM) Exam Two

The instructor reserves the right to modify or change any part of this syllabus at any time.